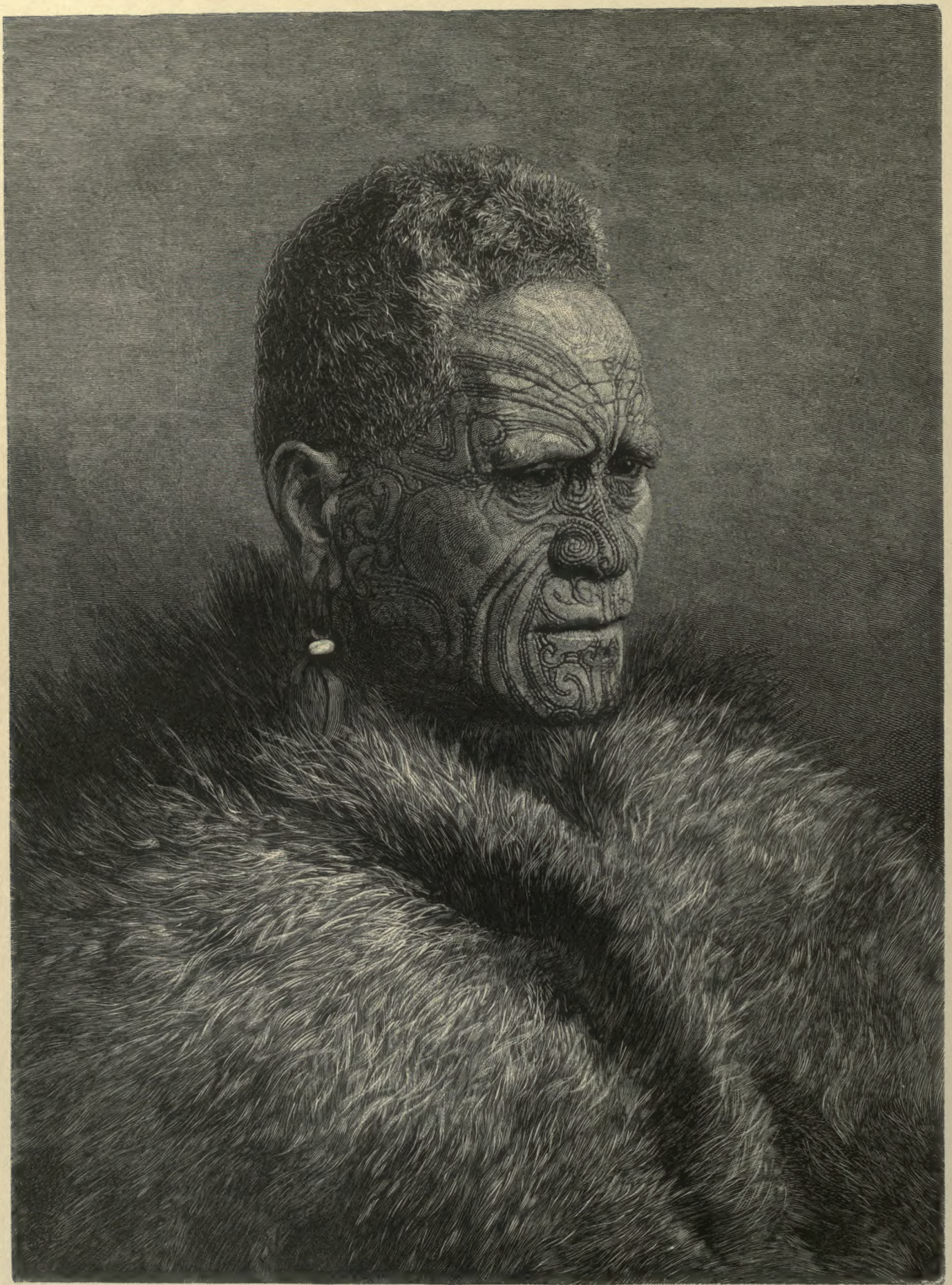


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THE MAORI KING.

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AUSTRALASIA

❧ ILLUSTRATED ❧

EDITED BY

HON. ANDREW GARRAN, M.A., LL.D., M.L.C.

ILLUSTRATED BY

LEADING AUSTRALIAN AND AMERICAN ARTISTS

UNDER THE SUPERVISION OF FREDERIC B. SCHILL

WITH OVER EIGHT HUNDRED ENGRAVINGS ON WOOD.

VOL. III.

477286
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PICTURESQUE ATLAS PUBLISHING COMPANY, LIMITED,

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SIR GEORGE GREY, K.C.B.



CAPTAIN W. R. RUSSELL, M.P



SIR H. A. ATKINSON, SPEAKER L.C.

THE DELEGATES FROM NEW ZEALAND TO THE FEDERATION CONVENTION, SYDNEY, 1891.



GISBORNE, POVERTY BAY, IN 1890.

HISTORICAL REVIEW OF NEW ZEALAND.

EARLY DISCOVERY.

THE French and Portuguese both claim the honour of discovering New Zealand, but the Dutch are entitled to the distinction. Captain Abel Janszen Tasman anchored in Cook Strait during December, 1642. He had been sent on a voyage of discovery by Van Diemen, the Governor of Batavia, having under his command the yacht *Heemskerck* and the fly-boat *Zeehaen*. After visiting Mauritius, he stood to sea on the 8th of September, and discovered Van Diemen's Land in November of the same year, whence he proceeded to the eastward and sighted land on the 13th of December, 1642, which he named Staaten Land, but which was subsequently named "New Zealand" by Captain Cook. At sunset on the 18th of the month the vessels cast anchor in Cook Strait, when an hour after, says the journal of Tasman, "we saw several lights on the land, and four vessels coming from the shore towards us. Two of these were our own boats. The people in the other boats called to us in a loud, strong, rough voice; what they said we did not understand; however, we called to them again in place of an answer. They repeated their cries several times, but did not come near us; they sounded also an instrument like a Moorish trumpet, and we answered by blowing our trumpet. Guns were ready prepared, and small arms for an emergency, and strict watch kept."

On the day following, a canoe paddled near the *Zeehaen*; but, though tempted by the proffer of food and objects of desire, none of the persons in the canoe could be

induced to venture on board the vessel. On the canoe returning to the shore, seven other double-canoes forthwith proceeded to the *Heemskerck*, and Tasman, not knowing their intention, sent a boat with seven men to warn his comrades to be on their guard and not to allow too many persons to come on board at once. When the boat had cleared the ship, the canoes paddled towards her, and the foremost of the natives, "with a blunt-pointed pike, gave the quarter-master, Cornelius Joppe, a blow on his neck that made him fall overboard;" but Joppe and two others swam to the vessel and were taken on board. In the scuffle that ensued three of the strangers were killed and a fourth mortally wounded. A dead man was carried away by the natives, and, without doubt, eaten. Tasman, finding there was small chance of getting supplies, hoisted in the ships' anchors and called the place "Murderers' Bay." When the ships were under weigh, twenty-two canoes crowded with natives put off from the shore, but they were greeted by Tasman with a broadside, and a man in the foremost canoe was seen to fall. The lesson was not lost on his fellows, who fled to the shore. Leaving the Middle Island, Tasman went north and rounded the northern portion of the North Island, calling its western extremity Cape Maria Van Diemen, after the daughter of the Governor of Batavia. He sighted some small islands which he named the Three Kings, it being the anniversary of the Epiphany. A boat was sent to the largest island in search of refreshments, but returned without landing, the heavy surf forbidding the attempt; while the sight of "thirty-five natives of large size, taking prodigious long strides, with clubs in their hands," apparently justified the caution. Tasman left the new land with an unfavourable impression of its inhabitants, whom he described as blood-thirsty and prone to hostility without provocation. He had been off the coast for some three weeks without landing.

More than a century and a quarter elapsed before another European is known to have visited New Zealand, when Captain Cook, after having observed the transit of Venus at Tahiti, went to the south in search of new lands, and re-discovered Tasman's "Staaten Land." He landed in October, 1769, at a place which he named "Poverty Bay" from the hostility of the natives and their lack of hospitality. He circumnavigated the main islands, and remained in New Zealand in 1769 and 1770 no less than one hundred and seventy-six days, surveying the coast-line and observing the country and its people. In November, 1769, he touched at a point on the coast which he named Mercury Bay, where he landed and erected an observatory for the purpose of observing the transit of Mercury—one of the chief objects of his expedition on that occasion. A signal-station was erected on the headland from which Captain Cook took his observation, now known as Shakespeare Head. On the 30th of January, 1770, Cook erected a flag-post on the summit of a hill in Queen Charlotte's Sound, where he hoisted the Union Jack, and after naming the Bay where the ship was at anchor after the Queen, he took formal possession of the country in the name of his Majesty King George the Third.

Cook made three voyages to the South Pacific, during which he visited New Zealand five different times, sojourning there on the several occasions three hundred and twenty-six days. His graphic description of the country and of its aborigines has led to his being generally regarded among English-speaking people as the discoverer. Examination of the east and west coasts of New Zealand proved that it consisted of two or more

islands, and was not part of a Great Southern Continent which, in the imagination of geographers, stretched across the South Pacific and extended over some thirty degrees of latitude. Men engaged in commerce became impressed with the value of the various articles which New Zealand produced, and hence of its importance as a market for manufactured goods; while the savant and the scientist regarded with great interest the information recently published respecting a race of people who, while having a real though hitherto undescribed form of civilization, were yet greedy eaters of human flesh. Cook's various visits to New Zealand extended from the 6th of October, 1769, to



DUSKY SOUND, MIDDLE ISLAND.

the 25th of February, 1777. In the second voyage in the *Resolution*, Captain Furneaux, of the *Adventure*, was associated with him, and lost in Cook Strait nine men, who were killed and eaten. Pigs, potatoes, and garden seeds were the memorials of Cook's visits among a race which possessed a land void of all quadrupeds, save dogs and rats.

Going north in his first voyage, after leaving the Bay of Islands, Cook named Rangungu "Doubtless Bay." He crossed its waters on the same day that De Surville, in the *St. Jean Baptiste*, was approaching the land at Mongonui. This early navigator shared the belief that the English had found an island of gold in the South Seas, and came from India to see if he could participate in the golden discovery. He was received by the natives with great hospitality; but finding nothing more valuable than spars for his ship, he proceeded to South America, carrying away in irons the Rarawa chief Ngakinui, who had entertained him and his sick seamen with great hospitality while on shore. Ngakinui pined on ship-board for his native food, and died some

eighty days after his seizure; while De Surville, eleven days only after the death of Ngakinui, was drowned in the surf at Callao.

In May, 1792, Marion du Fresne anchored his two ships, the *Marquis de Castries* and the *Mascarin*, at the Bay of Islands. Lieutenant Crozet, in command of the King's sloop *Mascarin*, had lost his masts, and the two ships put into the Bay of Islands to refit. Du Fresne was frequently on shore during his stay, and habits of intimacy begat confidence in the mind of the French commander in the friendship of the natives. Both races lived in harmony for several weeks. "They treated us," Crozet said, "with every show of friendship for thirty-three days, with the intention of eating us on the thirty-fourth." On the 12th of June, an attack was made on the French, when twenty-eight of the party and the commander were killed and eaten. A boat's crew had desecrated the sacred places of the tribe, and the payment for the sacrilege was the lives of the strangers. Crozet, who had a party of men engaged getting spars on the Kawakawa River, was also in danger of being entrapped by the treacherous savages; but being forewarned, he was enabled to punish those who had killed his companions and sought his own destruction. Here he refitted the ships, and after a stay of sixty-four days in the Bay of Islands, prosecuted his voyage.

INTERCOURSE WITH SYDNEY.

In 1787 the colony of New South Wales was proclaimed. It included in the wide expanse of its territorial limits not only New Zealand but all the islands in the Pacific Ocean within the latitudes of Cape York and the southern portion of Van Diemen's Land, as far east as the hundred and thirty-fifth degree of longitude. In 1792 intercourse with New South Wales was established, and the first Europeans became located in New Zealand. Mr. Raven of the *Britannia*, placed a sealing gang under the command of Mr. Leith, the second mate of the ship, at Dusky Bay. It was not until more than a year had elapsed that Mr. Raven went to look for Leith and his companions. He found that they had collected some four thousand five hundred skins, but had been "principally occupied in constructing a vessel to serve them in the event of any accident happening to the *Britannia*." The vessel was, although nearly completed, left behind by the *Britannia*. The sealers reported that they had received no molestation from the natives, who were apparently as sparse as when Cook visited them, and that the part of the Islands where they had resided for over a year offered but few advantages for commerce or settlement.

In September, 1795, Mr. Bampton, of the ship *Endeavour*, in company with the *Fancy*, left Sydney Cove for India, but on reaching Dusky Bay found his vessel so leaky that she was run on shore and scuttled. The vessel that had been built there by the sealers now came into request, and being found in the same state as she had been left by Mr. Leith, was completed and launched by Mr. Bampton. Collins tells us "that in addition to the large number of persons which Mr. Bampton had permission to ship in Sydney, nearly as many more found means to secrete themselves on board his ship and the *Fancy*." For these, as well as his officers and ship's company, Mr. Bampton had now to provide a passage from New Zealand. He accordingly, after fitting as a schooner the vessel he had launched, and naming her the *Providence*, sailed with

her and the *Fancy* for Norfolk Island, having on board as many of the officers and people as they could contain, leaving the remainder to proceed in a vessel which one Hatherleigh, formerly a carpenter's mate of *H.M.S. Sirius*, undertook to construct out of the *Endeavour's* long-boat. Hatherleigh was, however, unable to bring away all who were left behind by Mr. Bampton, and the fate of those remaining on the shore is unknown. The vessel he constructed at Dusky Bay was named the *Assistance*, and sold in Sydney for the sum of two hundred and fifty pounds sterling.

The skins of the seals caught by Mr. Leith and his fellows were the first articles of export the produce of any part of the colony of New South Wales, and the first-



THE REV. SAMUEL MARSDEN LANDING AT THE BAY OF ISLANDS.

fruits of the Australian seal-trade which proved so lucrative to the settlement, until the unrestricted slaughter of the animals, between 1800 and 1820, caused their capture to be no longer regarded as a generally lucrative enterprise. The two vessels, the *Providence* and the *Assistance*, built in New Zealand, were the earliest essays at ship-building in Australasia. The merchants of Sydney soon learned from visitors to New Zealand that timber from the Hauraki Gulf could be obtained and carried to the Cape of Good Hope and India, and disposed of at a profit; and thus, before New Zealand waters became celebrated for the abundance of whales, amicable relations sprung up between the Māori people and the colonists of New South Wales. Two New Zealanders were brought to Sydney in 1793, and sent to Norfolk Island to teach the people there the Māori mode of dressing flax, and Captain King, when accompanying them to their homes later in the year, gave them maize, wheat, peas and a quantity of garden seeds, besides pigs and hardware.

Some of the sailors on King's ships were sufficiently charmed by the prospect of a semi-savage life among the Maoris to be readily induced to throw in their lot with the tribe and remain in the country. There were from time to time a good many settlers of this class, of whom George Bruce was one. When the chief Te Pahi was returning from his voluntary trip to Sydney, this sailor had shown him considerable kindness during his illness on the voyage, and on the chief's arrival in his own country he easily persuaded young Bruce, with the offer of his daughter and a large piece of land, to leave his ship and remain. The young Englishman allowed himself to be tattooed, and



THE REV. SAMUEL MARSDEN.

conformed in every respect to the customs of the tribe. When he learnt the language he made himself very useful to the whalers by interpreting between them and the natives, by whom he was held in high estimation, until the arrival of an English vessel, the *General Wellesley*. Captain Dalrymple persuaded the lad, on the faith of a solemn promise of return, to come on board with his wife and assist in the search for gold near the North Cape. The search was not successful, and Dalrymple carried off his guests. He left Bruce at Malacca, but conveyed his wife away with him in his ship, selling her afterwards to the captain of another vessel at Penang. Bruce found her here after persistent search, and by invoking the aid of the authorities suc-

ceeded in getting his wife restored to him. They were given a passage to Calcutta, where they hoped to find a ship going to Sydney; but at this point the story loses them, and the daughter of Te Pahi and her husband returned to her native land no more.

Captain Enderby has recorded that whalers visited the dependency in 1794, and from that date to the present time the New Zealand waters have been frequented by the whaling vessels of many nations. In the full flush of the whaling trade, over a hundred vessels called at the Bay of Islands during the year, and Pomare, the grandfather of Hare Pomare, for whom Her Majesty became godmother, kept at one time ninety-six slave girls, who were in the habit of forming temporary unions with whaling visitors. Thus, each successive industry established in New Zealand—the sealing, felling and shipment of timber, whaling, the preparation of flax—each of which required the presence of European workmen on shore for considerable portions of time, led to the establishment of friendship between the Europeans and natives, resulting in unions which were sometimes of life-long continuance, and thus gradually prepared the country for those amicable relations which so much facilitated the first establishment of a small number of European settlers in a country possessing so large and warlike a native population.

EARLY MISSIONARY ENTERPRISE.

During the latter part of the days of Governor King, from 1805 to 1807, the first natives voluntarily went to England and to New South Wales. Te Pahi, the famous

Bay of Islands chief, was the most notable of these. Ruatara was another. While quite a lad he joined one of the whalers that touched at the coast in 1805, and after spending four years at sea he reached London in 1809. He came back with the Reverend Samuel Marsden, at that time the senior chaplain of the settlement at Port Jackson, and after spending a year there returned to New Zealand by way of Norfolk Island, where he was detained for some time. He visited Sydney again in 1814, and when Mr. Marsden with his missionaries went to New Zealand he accompanied the expedition. But perhaps the most famous of all, or only second to the ill-fated Te Pahi, was Hongi Hika, of the Ngapuhi nation. He was known among his own people as a brave warrior and a powerful chief. In 1814 he accompanied Ruatara to Sydney, and stayed for some time at the house of Mr. Marsden, observing the manners and customs of Europeans, and, we are told, embracing the Christian teaching. However, the models of Christian life and conversation brought under his notice in the convict times of the mother-colony do not appear to have influenced his character very beneficially, for we find him, soon after his return to New Zealand, as the pioneer of Christianity, engaging in destructive and successful wars with the tribes in the neighbourhood of Roturua, Hokianga, Whangaroa, and the Bay of Plenty.

Some years later, as we shall presently see, Hongi Hika went to England, with another chief, and was presented to George IV. These visits brought Australia and New Zealand nearer together, and it only remained for missionary enterprise to establish a permanent connection. From the time of the senior chaplain's first acquaintance with



THE FIRST MISSION HOUSE, WAIMATE.

these Maori visitors he seems to have entertained the project of instituting a mission to New Zealand, and from the date of the visit of Te Pahi and four of his sons in 1806, Mr. Marsden, to his death in 1838, never ceased his efforts to Christianize the New Zealanders. Between the missionary and the Maori chief a very warm friendship existed, and it was Te Pahi's innate nobility of soul, singular intelligence, and natural suavity of manner, that kindled in Mr. Marsden the desire to bring under the influence of the Gospel a race which he felt could not be otherwise than superior when it produced so fine a type. Te Pahi was the lion of his day in Sydney. He was fêted at Government House, shewn the sights of the city, and returned to his people impressed with the wondrous power of the white man, and anxious for the

introduction of his religion. He did not benefit, however, by his connection with the English. They stole his favourite daughter, his most promising son died from a disease contracted in England, and though the survivors of the *Boyd* massacre were rescued by him at the peril of his life, the Europeans, who took a blind and indiscriminating revenge for that deed of blood, destroyed his village, put his people to the sword, and severely wounded himself. He died at the hands of the Whangaroa natives for his act of humanity in saving and protecting the survivors of the *Boyd* affair.

In 1807 Mr. Marsden accompanied Governor King to Europe, and enlisted the aid of the Church Missionary Society in establishing a mission settlement in New Zealand. On his return to the colony in 1810 he brought with him two lay catechists for his mission. Messrs. King and Hall were both craftsmen, who expected to follow their useful and most honourable callings—carpentering, and the working in iron—and by their life and conversation to teach the natives the arts of civilization as well as the truths of Christianity and its benefits. It was not until his return to Sydney that Marsden heard of the disaster to the *Boyd*. This vessel, bound to England from Port Jackson, and carrying many passengers, had been burned to the water's edge at Whangaroa, about the end of November, 1809, and over seventy persons killed and eaten. Four only of

all the passengers and crew were spared—a woman, a cabin-boy, and two little damsels, both natives of New South Wales.

It had been proposed by the merchants in Sydney about this time to form a New Zealand Company in New South Wales, and the preliminary arrangements had been completed before news of the massacre came to Port Jackson; but when the tragedy was made known the idea was abandoned, and the catechists for the



THE SCENE OF THE "BOYD" MASSACRE.

New Zealand Mission proceeded to Parramatta, to wait for a time when the public indignation had cooled. Local feeling ran so high that it was hardly safe for a Maori to be seen in the streets of Sydney. Meanwhile Mr. Kendall came to join the Mission, but he also was sent with his wife and family to Parramatta until continued peace on the New Zealand Coast begat confidence. During the time of the disorder in New South Wales, consequent on the Governorship of Captain Bligh and his successors, a disastrous license

appears to have been taken by the ship-masters trading from Port Jackson to New Zealand, which provoked reprisals on the part of the natives, entailing some loss of life.

In 1814 Governor Macquarie gave Mr. Marsden leave of absence to go to New Zealand to establish his Mission, provided the natives on the east coast of the North Island were reported to be in a peaceful condition. To obtain the necessary information Mr. Marsden dispatched the brig *Active* to the Bay of Islands, under the command of Mr. Peter Dillon, who subsequently became celebrated for his discovery of the remains of La Pérouse and his expedition to the New Hebrides. Mr. Kendall accompanied the brig, and several native chiefs returned in her to strengthen the chances of Mr. Marsden's visit. On the Governor being satisfied of the report, the chaplain departed on his three months' leave of absence. He was accompanied by the catechists, Messrs. King, Hall and Kendall—the last of whom had been appointed Resident Magistrate of the Bay of Islands—and a Mr. Nicholas. Mr. Marsden opened his spiritual crusade at the Bay of Islands on Christmas Day, 1814. The natives had made rude preparations for the event by enclosing half an acre of land with a fence, erecting a pulpit and reading-desk in the centre, covered with native mats dyed black, and using as seats for the Europeans some bottoms of old canoes, which were placed on each



TE PAHI, CHIEF OF THE BAY OF ISLANDS.

side of the pulpit. A flag-staff was erected on the highest hill. Mr. Marsden writes:—
 "On Sunday morning when I was up on deck I saw the English flag flying, which was a pleasing sight in New Zealand. I considered it as the signal and the dawn of civilization, liberty and religion in that dark and benighted land. I never viewed the British colours with more gratification, and flattered myself they would never be removed till the natives of that Island enjoyed all the happiness of British subjects." After the celebration of the service, which was heard with much decorum and attention, Mr. Marsden preached from the passage in St. Luke, "Behold I bring you glad tidings of great joy." The natives of course knew not what he said, so that the sermon was perhaps more interesting than effective. After it was over they danced their war-dance. Christianity and cannibalism had come into contact. A new and bright morning had dawned on an ancient land.

After visiting the Thames, Mr. Marsden returned to New South Wales, leaving the catechists at the Bay of Islands. He did not again visit there until 1819, when an ordained clergyman, the Rev. S. Butler, was appointed to take charge of the station. The mission brig, the *Active*, which had been purchased by Mr. Marsden in 1814, was, however, kept running between Port Jackson and the Bay of Islands, so that the catechists were not left forlorn, while the whale-ships frequenting the Bay gave them the protection of their occasional presence. Acting under instructions from Governor



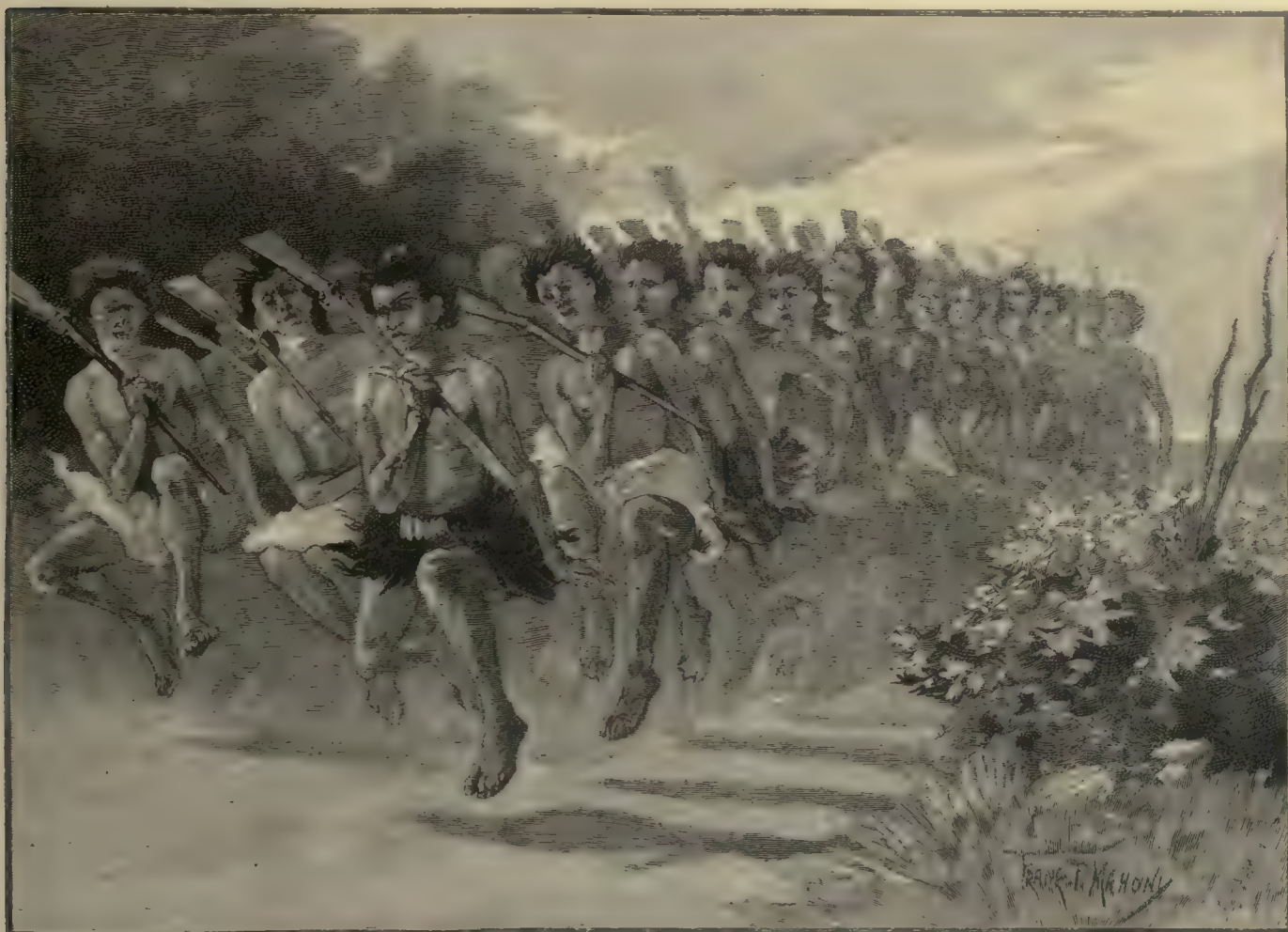
THE WAIKATO AT ATEAMURI.

Macquarie, Mr. Marsden explored a considerable portion of the northern part of New Zealand. He appears to have been the first European who published a description of the Hokianga River, which had been made known by Governor King from the map of the North Island drawn by the New Zealanders Tuki and Huru on the floor of the Governor's house at Norfolk Island. The year following he visited New Zealand

in H.M. store-ship *Dromedary*, which was sent thither to procure spars for topmasts for the Navy. He remained there for several months exploring the Thames, Tamaki and Kaipara Districts. He succeeded in reaching Katikati, which he considered to be the Mercury Bay of Cook, and was aided in so doing by the store-ship *Coromandel* being engaged in the Thames District on a similar mission to that in which the *Dromedary* was employed at the same time farther north.

About the time when the *Dromedary* arrived at the Bay of Islands; Hongi and Waikato, two Maori chiefs, accompanied by Mr. Kendall, proceeded to England in the *New Zealander*, whale-ship. The object of Hongi was the acquisition of fire-arms, for the purpose of settling a blood feud of some dozen or more years' standing with the Kaipara natives. Mr. Kendall wanted aid to put the Maori language into a written form, writing being a mode of communicating thought unknown to the native race. Both succeeded in their object. Hongi obtained an introduction to George the Fourth and the leading men of England. He was loaded with gifts, among which was a suit of armour; this he carefully cherished, but on returning to Sydney he disposed of his other presents and converted the proceeds into muskets and ammunition. Mr. Kendall obtained the assistance of Professor Lee in the construction of a vocabulary and a grammar of the

New Zealand language. Hongi, on his return, settled his feud and killed a large number of his foes, and for the subsequent five years, aided by the superiority of his weapons, carried death and destruction wherever he led the Ngapuhi people and their allies. His ravages extended as far south as the East Cape, while in the Waikato some two thousand persons were killed and partly eaten at a *pah* situated near the site of the present town of Alexandra. Probably ten thousand persons were killed in his various



A MAORI WAR-DANCE.

raids, though many writers have not hesitated to double the number of this estimate. The New Zealanders, it may be said, do not appear to have ever been so numerous as Captain Cook, Dr. Forster and others imagined them to have been. Only the harbours were visited by the early voyagers, and the natives being a race of fishermen were found congregating at fishing-stations—from which circumstance their numbers were somewhat disproportionately estimated.

THE FAILURE OF THE FIRST COLONIZING COMPANY.

In 1825 the first New Zealand Association was formed in London. It was composed of men of influence, among whom was Lord Durham. A vessel was fitted out for the purpose of exploring the country and conveying settlers to New Zealand. The command of the ship, called the *Rosanna*, was given to a Captain James Herd, a seaman well acquainted with the New Zealand Coast. No later than the year 1822 he had been in the River Hokianga in the ship *Providence*, when he witnessed a deed of conveyance of land from native chiefs to one Charles, Baron de Thierry, who in his absence was

represented by Mr. Kendall. The expedition arrived in the Hauraki Gulf in 1826, reached the Bay of Islands on the 26th of October of that year, and proceeded thence to Hokianga, where a purchase of land was made by Captain Herd at a place known to the present day as Herd's Point. A war-dance at one of the places visited by the *Rosanna* was said to have terrified the colonists, who insisted on being carried back to England, it having been a stipulation between them and the Company before leaving



A STAGE FOR A MAORI FESTIVAL.

were desirous of seeing some kind of authority established, thirteen of the chiefs of the Bay of Islands applied in 1831 to King William IV. for British protection, as the Governors of New South Wales, after the *régime* of Macquarie, no longer regarded New Zealand as one of the dependencies of the colony, while an Act of George III. stated New Zealand to be a place not within his Majesty's dominions. Representations were about this time forwarded to the Imperial Authorities from the Governor of New South Wales suggesting the appointment of a British Resident; and in the following year Lord Ripon dispatched Mr. James Busby, a civil engineer of New South Wales, who was then on a visit to England, to fill that position. *H.M.S. Imogene* was employed to carry him to his Residency, where he arrived on the 5th of May, 1833, and stationed

the port of departure that they should be re-conveyed to England if they disliked remaining in New Zealand; and of all the emigrants—said to be some sixty in number—only four elected to remain in New Zealand, Messrs. McLean, Nimmo, Gillis and Nesbet. The *Rosanna* went to Sydney early in the year 1827, where the stores of the expedition were sold by public auction, and Captain Herd, and those of the emigrants who felt disposed to do so, returned to England. The cost of the adventure was said to have been twenty thousand pounds. Through the influence of the missionaries who

himself at Waitangi, in the Bay of Islands, a short distance from the Paihia Mission Station. His appointment not answering the expectations formed, Governor Bourke recalled him in 1837. In 1835 Mr. Busby suggested that the New Zealanders should have a national flag enabling vessels built in New Zealand to possess freedom of trade in British ports, and the proposal being approved, *H.M.S. Alligator* was sent to the Bay of Islands with three patterns of flags for the chiefs to select from. The flag was chosen accordingly, and saluted as the standard of an independent country.

From the Bay of Islands *H.M.S. Alligator* proceeded to the west coast of the North Island to punish the Ngatiruanui tribe, who had behaved with inhumanity to the crew of the barque *Harriet* in April, 1834. This vessel had been wrecked near the spot where the town of New Plymouth now stands. She was commanded by one Guard, a sealer in Cook Strait, who had been to Sydney for supplies, accompanied by his European wife. According

to their general custom the natives attacked the shipwrecked party, and Guard, after defending himself with some resolution, fled with about a dozen of his crew, leaving his wife and two children prisoners, and his dead in the hands of the conquerors. While making their escape, Guard and his followers met a party of another tribe, about a hundred in number, to whom he surrendered. He was sent to the Moturoa, *i.e.*, "The Sugar Loaves," where the fugitives were hospitably treated. Guard carried the story of the wreck and the capture of the woman and children to Sydney, and Sir Richard Bourke sent by the *Alligator* a company of the Fiftieth Regiment to rescue the prisoners. Mrs. Guard and the children were released, two villages crowded with a mixed multitude of men, women and children were cannonaded, the habitations



A MAORI SALUTATION.

in two *pahs*, or fortified villages, and their accumulated store of provisions were burned, and the head of the principal chief, who had been slain, was cut off and kicked by the triumphant soldiers and marines as a foot-ball along the beach.

The same year "Charles, Baron de Thierry, styling himself a sovereign chief of New Zealand, and King of Nukuheva," one of the Marquesas Islands, laid claim to the rights of a sovereign chief in New Zealand. A meeting of the chiefs took place in response to an address from Mr. Busby, and a declaration of independence on the part of the Maori population was published under the style of "The United Tribes of New Zealand."

In 1837 Captain Hobson was at Sydney in command of *H.M.S. Rattlesnake*. A serious war was then raging among the tribes at the Bay of Islands, and Sir Richard Bourke thought it his duty to request Captain Hobson to proceed thither and protect British interests, and to report on the condition of the country. In the report, which attracted considerable attention, Captain Hobson proposed that factories should be established after the manner of the early trading companies of the English and Dutch. When making the recommendation he was probably not aware that the Sydney merchants had, in 1815, made a similar proposal to Governor Macquarie. He also made the humane and sagacious recommendation that a treaty should be made with the New Zealand chiefs for the recognition of the factories, and for the protection of British subjects and property.

MR. WAKEFIELD'S NEW ZEALAND ASSOCIATION.

In the same year, 1837, a second New Zealand Association was also formed, Mr. Francis Baring being the Chairman. Several of those gentlemen who were in the venture of 1825 were on the Committee, as well as some of those who were active in colonizing South Australia. Mr. Edward Gibbon Wakefield, in his evidence before a Committee of the House of Commons on Colonial Lands in the previous year, had drawn attention to New Zealand as being a field suitable for emigration and colonization. He said, in 1840, before the Select Committee on New Zealand:—"In consequence of that statement a Member of the Committee spoke to me on the subject, and afterwards other persons, and we determined to form an Association for the purpose of obtaining if possible from Parliament some regulation both for the colonization and Government of the islands" of New Zealand. Lord Glenelg was willing to grant the Association a charter of colonization under certain conditions, provided the consent of the chiefs could be obtained. One of these conditions was objected to by the promoters. Lord Glenelg insisted that a certain amount of capital should be subscribed and a fixed proportion paid before the Association should assume any authority. Lord Durham said the Association would "neither run any pecuniary risk nor reap any pecuniary advantage," and so the negotiation came to an end.

In June, 1838, Mr. Francis Baring obtained leave to bring in a Bill for founding a British colony in New Zealand, and though the first reading was carried by seventy-four votes to twenty-three, it was thrown out on the second reading by a majority of sixty. The Wakefield system of colonization, as it was called, was the establishment of colonies in which the grades of English society might be reproduced. The land, as in

England, was to belong to the employer, the cultivation of it to the workman, who, however, could easily work up into the position of a proprietor. The public lands were sold at such a price as would preclude their too easy acquisition, and labourers were to be conveyed from the one hemisphere to the other by the proceeds of the sale of the soil. The system was one of the means devised to provide labour and a public works fund, but the discovery of gold-fields in California and in the South Pacific about the middle of the century tended in some measure to destroy its applicability.

A month before the rejection of the Association's Bill a public meeting was held at Kororareka, in the Bay of Islands, to consider the best means of preserving life and



THE BREAKWATER, NEW PLYMOUTH.

property in the district, when the Kororareka Association was formed on the lines of vigilance committees in America. Soon after the information of the proceedings at Kororareka reached England, the Colonial Office saw that further delay would be fatal to British interests, and the annexation of New Zealand to the Empire was resolved on. Still it proceeded tardily. In December, 1838, it was proposed that a British Consul should be appointed to reside in New Zealand, and Sir George Gipps was officially informed of the intention; but it was not until the middle of the next year that the selection of a consular agent was made, and it was determined that "certain parts of the islands of New Zealand should be added to the colony of New South Wales as a dependency of that Government, and that Captain Hobson, R.N., should proceed thither as British Consul to fill the office of Lieutenant-Governor." In June and July the arrangements were gazetted; in August, Lord Normanby gave the Consul his instructions, and that official at once prepared to proceed with his family in *H.M.S. Druid* to Port Jackson, where he arrived on Christmas Eve of 1839.

Captain Hobson's instructions were to establish a form of civil Government with the consent of the natives, to treat for the recognition of her Majesty's authority over the

whole or any portion of the Islands; to induce the chiefs to contract that no lands should in future be sold except to the Crown; to announce by proclamation that no title to land acquired from the natives of the dependency would be recognized except confirmed by a Crown grant; to arrange for the appointment of a Commission to determine what lands held by British subjects had been lawfully acquired; and to appoint a Protector to supervise the interests of the Maori population.

But while the Colonial Office was making the arrangements described, Mr. Wakefield was not idle. After the collapse of the Association of 1837, he had been with Lord Durham to Canada, but returned with his chief to England and formed a New Zealand Land Company, of which Lord Durham was Governor, and Mr. Joseph Somes Deputy-Governor. The first paragraph in the prospectus of the Company declared its character, and showed that it was not open to the objection made to the Association. It said: "This Company has been formed for the purpose of employing capital in the purchase and resale of lands in New Zealand, and the promotion of emigration to that country." The capital was four hundred thousand pounds in four thousand shares of one hundred pounds each, with a deposit of ten pounds per share. Rusden says:—"A capital of one hundred thousand pounds was paid up, and a hundred thousand acres of land in New Zealand had been sold before a title to one had been acquired. They (the shareholders who paid money) drew lots for sections unknown, of lands which the Company was about to seek."

The *Tory*, a vessel of four hundred tons burthen, was prepared to sail in April with the first body of the Company's settlers, and letters of introduction were solicited at the Colonial Office to Governors of colonies. The answer was that the Queen would be advised to take measures to obtain by cession the sovereignty of the Islands, and that no pledge could be given for the future recognition on the part of the Crown of any titles to land which the Company or any other persons might obtain by grant or by purchase from the natives. Nothing daunted, however, by this rebuff, the *Tory* sailed in May, 1839, under the control of Mr. Wakefield's brother, Colonel William Wakefield, of the Spanish Legion. Two days after the departure of the *Tory* the Directors announced to the Government that the Company was formed, and Lord Normanby was informed that preparations for a very extensive emigration were in progress in various parts of England and Scotland.

The *Tory*, which carried an exploring staff and a cargo of "trade" for barter with the New Zealanders, arrived at Queen Charlotte Sound after a rapid passage, at the time, of ninety-six days; and after wandering about Cook Strait on land-purchasing expeditions, Colonel Wakefield, on the last day of September, 1839, took formal possession of Port Nicholson in the name of the Company, and the New Zealand flag was hoisted under a salute, on an immense staff erected for that purpose. Colonel Wakefield reported to the Company that he had purchased a territory as large as Ireland, extending from the thirty-eighth to the forty-third degree of south latitude on the west coast, and from the forty-fourth to the forty-third degree of latitude on the east coast, in exchange for goods valued at something less than nine thousand pounds. His purchase embraced localities where the Company's settlements of Wellington, Nelson and New Plymouth were subsequently formed. The interpreter of the Company was a man

named Barrett, who had been many years in Cook Strait, first sealing and then whaling, and who had "picked up" the usual "pigeon" Maori in use among the whalers, but was quite unable to render complex sentences into the Maori language, which frequently requires the use of words having several meanings. The deeds of sale were written in English, the true meaning of which Barrett could not translate into Maori.

After dispatching the *Tory*, however, the Directors in England, presuming on the success of their agent, actually proceeded, as we have seen, to sell land to the value of more than one hundred thousand pounds, and to send out emigrants before they knew that a single acre had been assigned. In October, 1839, a vessel named the *Comte de Paris*, having on board emigrants, left France for Akaroa, in the Middle Island, while the French frigate *L'Aube* was destined for the same port.

THE TREATY OF WAITANGI.

Captain Hobson left Sydney in *H.M.S. Herald* for the Bay of Islands, where he arrived on the 29th of January, 1840. He was accompanied by a Treasurer, a Collector of Customs, a Police Magistrate, two clerks, a sergeant and four men of the mounted police of New South Wales. As soon as the *Herald* left Port Jackson, Sir George Gipps issued three proclamations, the first extending his Government to any territory

which had been or might be acquired in sovereignty by Her Majesty, within the group of Islands in the Pacific Ocean, commonly called New Zealand; the second, appointing Captain Hobson Lieutenant-Governor of any territory that might be acquired by Her Majesty; and the third declaring "that Her Majesty would

not acknowledge as valid any title to land which either has been, or shall be hereafter acquired in that country, which was not either derived from or confirmed by a grant to be made in Her Majesty's name and on Her behalf." To the Sydney land claimants the latter proclamation was especially obnoxious, as the traders there had bought large tracts for speculative purposes. Captain Hobson, on his arrival at the Bay of Islands, issued an invitation to all British subjects to meet him at the Church of Kororareka the next day, where he read two commissions—one extending the limits of New South Wales, and the second appointing him Lieutenant-Governor over such portions of New Zealand as might thereafter be added to Her Majesty's dominions. Two proclamations were also read, the first announcing that Her Majesty's authority had been asserted over British subjects in New Zealand; and the second that Her

Majesty did not deem it expedient to acknowledge as valid any titles to land in New Zealand which were not derived from or confirmed by the Crown. After the proclamations had been read, in the "presence of a concourse of persons," forty of the settlers



THE TREATY MONUMENT.

present signed a declaration descriptive of the day's proceedings, and on Monday, the 4th of February, an address of congratulation, written by Doctor, now the Honourable Dr. Pollen, M.L.C., was presented to his Excellency by the inhabitants of Kororareka, assuring him of their loyalty and desire to "aid him in establishing law, order and security for life and property in an improving and important colony." Notices in the native language had been circulated on the Friday previous stating that Captain Hobson

would, on the 5th of February, hold a meeting of the chiefs for the purpose of explaining to them the Royal Instructions he had received, and of placing before them a copy of a treaty he would submit for their adoption. This treaty, since known as the famous "Treaty of Waitangi," on which was based the title of the Crown to the North Island, may be



BUSBY HOUSE.

thus condensed:—The preamble stated that the Queen of England, in her regard for the Maori people, desiring to preserve for them their rights as chiefs and the possession of their lands, and also—having heard that many of her subjects had settled in New Zealand, and that more were about to follow—to prevent troubles arising between the two races, had thought it right to send William Hobson, Captain in the Royal Navy, to be a Governor for all parts of New Zealand now or hereafter ceded to Her; to carry into effect which object the following articles of agreement are proposed:—

I. The chiefs of New Zealand cede to the Queen forever the right of Government over the whole of New Zealand.

II. Her Majesty the Queen of England confirms and guarantees to the chiefs and tribes of New Zealand, and to the respective families and individuals thereof, the full, exclusive and undisturbed possession of their land and estates, forests and fisheries, and other properties which they may collectively and individually possess, so long as it is their wish and desire to retain the same in their possession. But the chiefs of the united tribes, and the individual chiefs, yield to Her Majesty the exclusive right of pre-emption over such lands as the proprietors may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by Her Majesty to treat with them on Her behalf.

III. In consideration for consent to the Queen's Government, the Queen will protect all the Maori people and give them all the rights and privileges of British subjects.

Under this Treaty the natives not merely ceded to the Queen the right to purchase

such land as the owners were willing to sell, but "the pre-emptive right of selection over all lands;" and the practical interpretation put upon this by each of the Governors except Fitzroy was that the Queen might have the refusal of all lands the natives were willing to sell, and if that refusal were given no one else would be allowed to buy. This was one of the chief grievances that underlay the Maori disaffection of the future.

Soon after Captain Hobson arrived in Sydney, Bishop Broughton, the first Bishop of Australia, wrote to the Rev. H. Williams, who held the greatest amount of influence in the Church Mission, that upon the fullest consideration his judgment inclined him very strongly to recommend Mr. Williams, and through him all other members of the Mission, that their influence should be exercised among the chiefs to induce them to make the desired surrender of sovereignty to Her Majesty. Captain Hobson had, it will be seen, the Mission influence on his side, though the British Resident, Mr. Busby, held aloof from signing the address of congratulation to his Excellency, and nearly all the land-claimants resident in New Zealand



PLANTING THE BRITISH FLAG AT AKAROA.

viewed the advent of the Governor with alarm. The Treaty was adopted in great part all over the land by Mission influence, and the singular spectacle was manifested of the Church and Wesleyan societies relinquishing the power it had cost them some quarter of a million sterling to acquire.

On the 1st of March the Governor, while looking for a place to found a city to be the seat of his future Government, became partially paralyzed in his right arm and leg. The Rev. Henry Williams had, however, a day or two before, shown him the Tamaki District, and he tells us how "his Excellency was not long in pointing out the spot, the present site of Auckland, seeing immediately its various advantages." On the Governor becoming ill he was taken to the Bay of Islands, and in a Mission family nursed back to health, while the missionaries took up the task of getting the Treaty signed, which may be regarded as their handiwork; for though the Governor's suite were witnesses in many places to the signatures of the chiefs, it was the personal influence of their teachers that made the natives rally round the officers sent them by the Queen of England. On the 21st of May, 1840, the Governor proclaimed the sovereignty of the Queen over the North Island of New Zealand by virtue of the Treaty of Waitangi, and over the Middle and Stewart's Islands on the ground of discovery.

The New Zealand Land Company meantime had been actively at work. When the proclamations declaring the sovereignty of the Queen were published, there had been landed from the Company's vessels in Port Nicholson more than a thousand passengers, who had "formed themselves into a Government, elected a Council, appointed Colonel Wakefield President, and had proceeded to enact laws and appoint magistrates." As soon as the Governor heard of their proceedings, "without one hour's delay" he sent thirty men of the Eighth Regiment, who had been drafted from New South Wales, and Lieutenant Smart with five of the mounted police of that colony, under the command of Lieutenant Shortland, R.N., with instructions to publish a proclamation declaring the Provisional Government of the Company illegal and usurping, and calling on all persons, upon their allegiance to the Queen to withdraw therefrom, and to "submit to the authorities in New Zealand legally appointed." The settlers informed Lieutenant Shortland that they had formed themselves into a Council only until the Governor was enabled to act. All they had done was to make provision for their own good order and safety in a country possessing no settled form of Government. They had no disloyal intent or purpose whatever, and welcomed his arrival amongst them. The proclamation was read and responded to by both races, while an address of congratulation was carried by Colonel Wakefield to the Bay of Islands and presented to the Governor.

Lord John Russell, on receipt of Captain Hobson's despatch detailing his proceeding, gave his "entire approbation" to all that had been done, and stated that he would soon transmit Letters Patent constituting New Zealand a separate Government, with a commission appointing Captain Hobson the first Governor. The latter pursued his inquiries as to the best site for the seat of Government, and at last determined to select Auckland for various reasons, as set forth to the Secretary of State, namely, on account of its central position; the great facility of internal water communication; the facility and safety of its port; and finally, the fertility of its soil, which was stated by persons capable of appreciating it, the Governor said, to be exceptionally well adapted for every agricultural purpose. Previous, however, to his fixing the site, he had been assured, in the address presented to him by the inhabitants of Port Nicholson, that they had anticipated as far as possible the wants of the Government, and set apart the most valuable sections of land for the convenience of the Public Offices, and the personal accommodation of his Excellency, feeling assured that sooner or later Port Nicholson would become the metropolis and the seat of Government.

The selection of Auckland as the capital disappointed the expectations of the New Zealand Land Company, and apparently deprived the Governor of the good-will of the Company's agents and settlers, the latter of whom had been led to expect that the spot selected by the Company's agents would be the future capital of the colony. It was also the Governor's duty to report to Sir George Gipps that the title of the Company to Port Nicholson itself was disputed by the natives, and thus to manifest to them his determination to honourably fulfill the conditions of the Treaty, which, on behalf of the Crown, he had concluded with them. A great deal of angry feeling was evoked in consequence of these two circumstances, and the Press, under the influence of the Company, both in Wellington and in England, misrepresented much that the Governor did, impugning his motives and assailing his Administration. Conscious of his rectitude,



THE REMARKABLES.

writhing under the attacks of anonymous writers, and irritated by the petition that had been sent to England for his recall, he wrote to the Secretary of State in May, 1841: "Had I been base enough to prefer my own comfort to what I believed to be the public benefit, I could have established myself at Port Nicholson, when, surrounded by a compact society all identified with the place, I might have left it to the Company's agents or their Press to answer any censure which might flow in upon me from any quarter. Or, had I been still more base, and kept in view my pecuniary advantage, there could have been no scheme devised better calculated to ensure my fortune and that of my friends than presented itself at Port Nicholson. I needed but to have speculated largely in the Company's shares, and having raised their value by the location of Government, to have sold off my interest while they preserved their artificial value." The reply was a conclusive one.

Two other incidents in the Governorship of Captain Hobson are especially worthy of note. The French frigate *L'Aube* had reached the Bay of Islands before the *Comte de Paris* had arrived with the immigrants intended to be placed at Akaroa. Suspecting the captain of the frigate of cherishing designs on the Middle Island inimical to British interests, the Governor sent *H.M.S. Britomart* to Banks Peninsula, directing the commander to proceed thither with all dispatch, so that before the arrival of the *L'Aube* or the *Comte de Paris* possession might be taken.



BISHOP SELWYN.

BRITISH INSTITUTIONS.

A Charter for establishing in the colony of New Zealand a Legislative and an Executive Council, and for granting certain powers and authority to the Governor, was signed by the Queen on the 16th of November, 1840, and published in the colony on the 3rd of May, 1841. The Letters Patent described the new colony as consisting of the group of islands lying between thirty-four degrees thirty minutes and forty-seven degrees ten minutes south latitude, and one hundred and sixty-six degrees five minutes and one hundred and seventy-nine degrees east longitude; and declared that the three principal islands known as the Northern, Middle, and Stewart's Islands should in future be designated New Ulster, New Munster, and New Leinster.

The New Zealand Association, in 1837, pointed out the necessity for a bishop for New Zealand, and the idea engaged the attention of the New Zealand Land Company; but early in 1841 the proposal was adopted on an extended and proper basis by the Church of England, and a Colonial Bishopricks' Council was formed, which wisely chose the Rev. Augustus Selwyn, curate at Windsor, for the office of the first Bishop of New Zealand. He sailed by way of Sydney about the end of the year 1841, and

landed at Auckland, the seat of his diocese, on the 29th of May, 1842. He soon proved an important factor in the spiritual and temporal affairs of the country.

Having lawyers of remarkable ability associated with him, the Governor was able to report that Ordinances had been passed to establish a Supreme and County Courts; for the constitution of juries; for regulating the practice of petty sessions; for establishing municipalities; for promoting religion; for regulating postage; for registration of deeds and instruments affecting real property, and for facilitating its transfer; to render certain marriages valid; for regulating the sale of liquor; for licensing auctioneers; for securing copyright in books; and for repealing the Ordinance which gave force in New Zealand to the laws of New South Wales.

Captain Hobson died on the 10th of September, 1842, from a paralytic seizure, at the age of forty-nine years. Few British Governors have had to peacefully acquire the countries they governed. His Treaty of Waitangi was "a Christian mode of commencing the colonization of the colony." "His justice," said Swainson, his Attorney-General, "was inflexible." The Maori opinion of his merits was noted in a letter to the Queen from Te Wherowhero, the future Maori King, which said:—"Mother Victoria: My subject is a Governor for the Maori and Pakeha in this Island. Let him be a good man. Look out for a good man. A man of judgment. Let not a troubler come here. Let not a boy come here, or one puffed up. Let him be a good man as the Governor who has just died." Captain Hobson's monument is the city of Auckland, where he died.

THE WAIRAU MASSACRE.

Lieutenant Shortland, the Colonial Secretary, assumed the duties of Governor on the death of Captain Hobson, and continued acting until December, 1843, the period of the arrival of Captain Fitzroy, who was appointed Captain Hobson's successor. The Acting-Governor ruled by proclamation, with the aid of laws already enacted, and avoided calling the Legislative Council together. During his rule there occurred what was known as the "Wairau Massacre," when Captain Wakefield, the brother of the Company's principal agent, and nineteen of the settlers imported by the Company, were killed in the Wairau Valley. The Company claimed to have purchased the land, but the natives asserted that they had not sold it. Surveyors were, however, sent to survey the Valley, and the natives considering their action as preliminary to occupation, burned down the surveyors' hut by way of protest, after first taking care to scrupulously remove all the property the structure contained. The claim of the Company to the Wairau Valley was of a twofold character. It assumed direct purchase from Rauparaha and the Ngatitōa, who, however, constantly denied ever having sold it. There is no reason to doubt but that, through imperfect translation, Colonel Wakefield had been misinformed as to the boundaries of the lands the natives agreed to sell, and that the native contention was in accordance with fact.

The other claim of the Company to the Valley was the purchase of the rights of a woman in 1839, who claimed to be the wife of a Captain Blunkinsopp. It appears that some time in the year 1831 Blunkinsopp had been whaling in Cook Strait, and during the time of his visit, according to whaling custom, the daughter of Te Pehi, a kinsman of Rauparaha, lived with him as his wife. As payment for her, and the privilege

of wood and water for his ship, he gave the natives an old cannon, but drew up in English a deed of purchase of Wairau and its neighbourhood, and put the six-pounder into the document as purchase-money. The deed was mortgaged to Messrs. Unwin and Co., solicitors, Sydney, for two hundred pounds, and as Captain Blunkinsopp was not able to redeem the mortgage, the deed of conveyance was forfeited. The captain was drowned in South Australia before the New Zealand Land Company had agents in New Zealand, and the daughter of Te Pehi, on hearing of his death, had gone north to Hokianga. There Colonel Wakefield met her in December, 1839, and bought her rights, if any, to the Wairau Valley. Her claim consisted of the copy of the deed of conveyance, the original of which was in Sydney.

A warrant to arrest two leading chiefs who disputed the sale of the lands (Rauparaha and Rangihaeata) was obtained, and a Mr. Thompson—a police magistrate—eight of the Company's settlers and forty labourers, accompanied him to aid the service. Thirty-five of the party were armed, but the majority of them were unacquainted with the use of fire-arms, and were useless in such a contest as afterwards arose. The expedition sailed from Nelson, the third of the Company's settlements, and anchored in Cloudy Bay on the 15th of June. Two days after landing, Rauparaha was found encamped by a stream with about one hundred followers. A canoe was in the creek, and Captain Wakefield, Mr. Thompson and others, crossed the creek in it to where the natives were assembled. The Police Magistrate told Rauparaha that he had come to arrest him and Rangihaeata for having burned the surveyors' hut; he had not come about the land. Rauparaha,



THE CARVED GATE-WAY OF AN OLD "PAH."

who as usual was the spokesman, distinctly refused to be arrested, told the Magistrate that the hut was his own property, and desired that the dispute about the title to the land should be referred to the Land Commissioners' Court for settlement.

Thompson was averse to any other course than the arrest of the chiefs, and called on his men to fix bayonets and execute their warrant. Wakefield cried out, "Englishmen, forward!" and in the rush that followed the command a shot was fired and a woman fell, who happened to be Te Ronga, the daughter of Rauparaha and the wife of Rangihaeata. On this the natives returned the fire, and the English, who had formed into line, broke and fled, and Wakefield and Thompson could not rally them. A white handkerchief was waved in token of submission, and five of the settlers and four of the labourers, who refused to run, surrendered themselves to Rauparaha; but Rangihaeata, who had lost his wife, tomahawked them all. Nineteen bodies were found and buried by Mr. Ironsides, a Wesleyan minister, a few days after the slaughter. Four natives were also killed. None of the dead had been mutilated or eaten.

The Company's agents and settlers were anxious to avenge the death of their companions, but Lieutenant Shortland, who held a tight rein on the Company, reserved the question of punishment for the consideration of Captain Hobson's successor. Lieutenant Shortland's Administration had been beset with difficulties, but his firmness and sagacity preserved the peace of the colony, and the general feeling prevailed that he was entitled to the gratitude of the Home Government and the colonists for the manner in which he had conducted the affairs of New Zealand. When party feeling had worn away, this opinion was generally shared both by his successors and others. Emigration to New Zealand was checked by the news of the Wairau conflict. Memorials were sent to the Governors of adjacent colonies for troops, and seven hundred persons petitioned Her Majesty to inquire into the condition of the colony.

GOVERNOR FITZROY.

In November, 1843, Captain Fitzroy reached New Zealand, and in January of the following year proceeded to Wellington in *H.M.S. North Star*; Captain Sir Everard Home arriving there about the end of the month. From Wellington he went to Nelson, where he publicly rebuked the magistrates who had signed the warrant for the arrest of Rauparaha and Rangihaeata, telling them that "arson" was the burning of another man's house, while the natives had burned only their own property when they set fire to the surveyors' hut. The natives had never sold the Wairau. Several of the magistrates thus rebuked immediately resigned their commissions. From Nelson he went to the northern side of Cook Strait to visit Rauparaha at Waikanae. On this occasion he was accompanied by Mr. Forsaith—afterwards Premier, and at that time a Sub-protector of the native population—as interpreter. At the interview there were several Europeans and some five hundred natives present. Rauparaha was seated close to the Governor's chair, and Rangihaeata on the outer portion of the semicircle formed by the natives. Captain Fitzroy told them that he had heard the European version of the causes of the fray, and he was there to hear the Maori side of the story. Rauparaha was invited to speak, which he did reluctantly. He said the land was the cause of the dispute, it not having been purchased from the rightful owners, and narrated how often he had

warned the Company's servants not to occupy it. He stated that Mr. Thompson twice ordered his party to fire on the natives, and when, after having been made a prisoner, he appealed to him to save his life, Rangihaeata made him remember his wife, Te Ronga, and added, "A little while ago I wanted to talk to you in a friendly manner, and you would not. Now you say, save me. I will not save you."

When Rauparaha had concluded his narrative the Governor spent some half-hour in consultation with the Europeans, after which he rose and said: "Hearken, O chiefs and elder men, to my decision. . . . In the first place the Pakehas were in the wrong;



A CARVED HOUSE IN KING COUNTRY.

they had no right to build houses upon the land, the sale of which you disputed, and on which Mr. Spain had not decided; they were wrong in trying to apprehend you who had committed no crime. . . . As they were greatly to blame, and as they brought on and began the fight, and as you were hurried into crime by their misconduct, I will not avenge their deaths." He further told them that a terrible crime had been committed in murdering men who, relying on their honour, had surrendered. They must live peaceably. He would do equal justice, and promised that no land should be taken from them which they had not sold.

The English Government had sent out a Mr. William Spain as a Commissioner to hear evidence as to reputed purchases of land in New Zealand. He arrived in the colony in December, 1841, but his court at Wellington was not opened until May following. The Company averred that they had purchased some twenty millions of acres—a territory, in fact, as large as Ireland. Mr. Spain insisted that the Company, like

other claimants, should prove that the signers of the deeds of sale "had a right" to convey the land they sold. In England and in the colony, Mr. Spain's mode of procedure was strenuously opposed by the New Zealand Company and its agents. Colonel Wakefield submitted to the Court six purchase deeds; those of Port Nicholson, Nelson, Taranaki, Wanganui, Porirua and Manawatu, for which he sought to obtain Crown grants. Prior, however, to the taking of evidence as to ownership, Mr. Spain told Colonel Wakefield that to ask the Government for a Crown grant of land, whether the native title was extinct or not, was calling upon it to do that which was totally out of its power to do, as the Crown could not grant that which the Crown did not possess. After many sittings of the Court, Mr. Spain reported in 1843 that the New Zealand Land Company's agents had bought two hundred and eighty-two thousand acres: seventy-one thousand nine hundred acres in the Wellington District, one hundred and fifty-one thousand in Nelson, and sixty thousand at New Plymouth. The latter award Captain Fitzroy objected to ratify, and limited the area he considered the Company had fairly purchased to three thousand five hundred acres. This decision, which the Governor had power under the law to give, created much discontent among the Europeans of Taranaki.

Governor Fitzroy regarded in a somewhat loose manner the Treaty of Waitangi. The spirit of the instrument, in the interests of colonization, consisted in the Crown's right of acquiring all lands alienated by the natives. By proclamation he allowed private persons to purchase land direct from the natives on payment to the Government of ten shillings an acre royalty on the acreage purchased. The natives, when discussing the Treaty before signing it, said the shadow of the land went to the Queen, but the substance remained with them; now they found the Government wanted the substance, as those who bought land under these conditions impressed on the sellers that the pittance they gave as purchase-money was all they could afford to give, since the Governor got ten shillings for every acre purchased. It is not surprising to learn that only one thousand seven hundred and ninety-five acres were thus acquired. He then reduced the royalty payable to the Crown to a penny per acre, when ninety thousand acres were purchased, much of which, situated in the immediate locality of the city of Auckland, would have proved of great subsequent value to the public at large if it had been acquired by the Government.

In May, 1844, the Governor sanctioned an Ordinance to issue debentures and make them a legal tender, being sorely pressed for money; but the Ordinance was disallowed as being contrary to the Royal Instructions and the welfare of the colony. In June he amended the Ordinances of 1841 levying custom dues, and imposed a duty of thirty per cent. on guns, gunpowder, or weapons of any description, or "any munition of war." In September of the same year he passed an Ordinance repealing all customs duties and declaring all the ports in the colony free, and imposing a tax of one per cent. on property, real and personal, over the value of one hundred pounds. The Ordinance of September was, however, repealed by a new law made in April, 1845, which abolished the property tax and the customs Ordinance of the previous year. The sudden changes in taxation arose from the Maori dissatisfaction in the Bay of Islands District and from the decrease of whalers frequenting the Bay. When customs dues and port charges were levied consequent on the establishment of civil Government, whaling-masters found that



THE MANAWATU GORGE.

other places in the South Pacific were less expensive than Kororareka had become, and the cheaper ports of call were chosen as refreshment places. Tobacco became scarce, and new blankets not being easy to acquire, the natives considered that the emblem of British authority—the flag-staff on the hill overlooking the town—was the cause of the

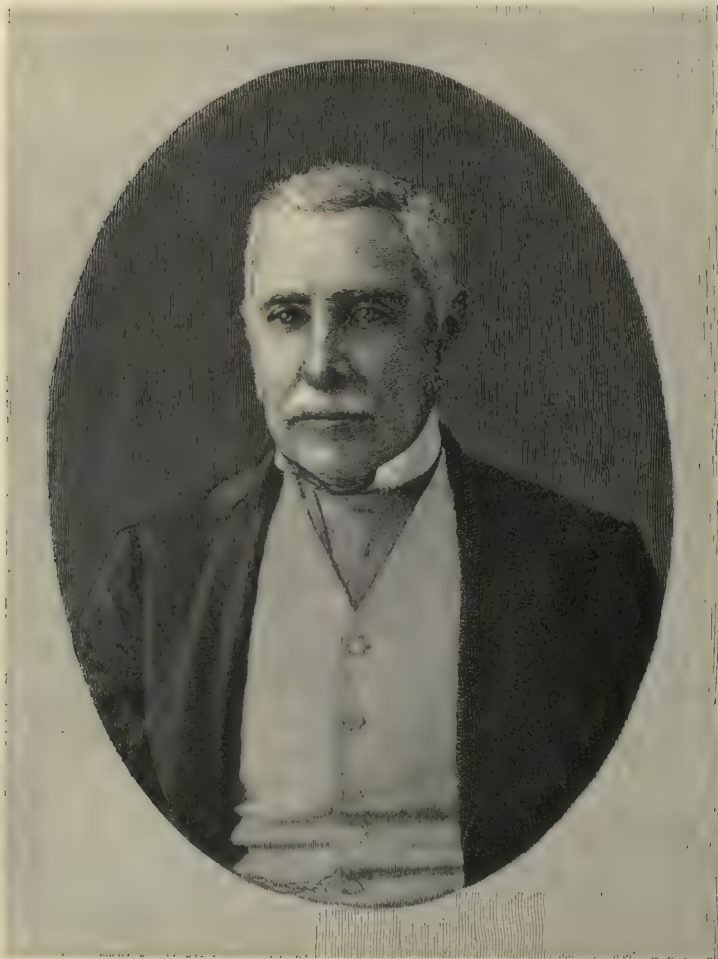
decay in their shipping revenue, and, as a writer remarked, the idea arose in the native mind “that if the flag-staff were cut down, the fine old days of Kororareka would return.”

On the 8th of July, 1844, a native chief named Hone Heke cut down and burned the Kororareka flag-staff and carried away the signal-balls. The Governor sent to Sydney for troops, which arrived in New Zealand early in August. The chiefs, interviewing the Governor, promised to maintain peace, and the flag-staff was again erected;

but was again cut down. In March, 1845, it had been erected thrice, and on the 11th of the month was cut down for the fourth time, and the town of Kororareka destroyed by fire when occupied by the British troops. It contained some four hundred souls, who were sent on board a ship in the Bay and conveyed to Auckland, the settlement being abandoned. About the end of April the Governor proclaimed war against the native insurgents, re-inforcements having arrived at Auckland from Sydney. Several expeditions were undertaken against the rebels, in which the British troops suffered great loss without gaining any advantage. These reverses diminished the British prestige, and induced many malcontents who lost faith in the troops' invincibility to join the insurgents. The war, coupled with the lack of funds for almost any purpose whatever, caused Captain Fitzroy to be recalled by Lord Stanley in May, 1845.

GOVERNOR GREY.

Captain Grey, who was now appointed Governor, was courteously received on his arrival in Auckland on the 14th of November, 1845, by Captain Fitzroy, from whom he obtained the most valuable assistance and information upon entering on his new



SIR GEORGE GREY.

duties. He found that some naval and military forces had arrived from China, and that others were to follow. Naval and military men of known ability had been selected with considerable care to aid him in the difficult circumstances in which he was placed. He thus occupied a much stronger position than that in which his predecessor had laboured. Among the officers was Colonel Despard, in command of the troops, who had already acquired some experience in Maori warfare; Commodore Graham, a distinguished naval officer, the brother of Sir James Graham; and Sir Everard Home, who bore a high reputation not only for naval ability but for his scientific attainments. After the Governor's installation he proceeded to the Bay of Islands, where the war was still in progress. He gave the natives to understand that after a certain fixed

date he expected the belligerents to return to the loyalty which they had promised to observe by the Treaty of Waitangi, the conditions of which he also intended scrupulously to maintain. Returning to the seat of Government before the 13th of December, he passed the "Arms Importation Ordinance," prohibiting the natives from acquiring arms, gunpowder, or other warlike stores. This step on his part alarmed many people, who

feared the Ordinance might affect many neutral tribes to the extent of inducing them to join the chiefs in revolt, especially those who were residing between Auckland and the Bay of Islands. On the 11th of January of the year following, the strong fortress of Ruapekapeka was captured by a party while its defenders were engaged in Divine Service, the day being Sunday. Then the northern disturbances came to an end, the natives pledging themselves to maintain for the future an inviolable peace—a promise which has never since been broken.

The difficulties in the northern portion of the colony having been thus concluded, the Governor turned his attention to the south, which was in a troubled condition. Several murders had been committed by the natives on settlers who occupied lands of which the titles were disputed. In February 1846, the Governor left Auckland for



LAKE TAUPO.

(From a Picture by Mr. Charles Blomfield.)

Wellington with all the force at his command. The relations between the two races continued to be unsettled, until in May and June the natives attacked the troops in the Hutt Valley, killing and wounding several. A general feeling of insecurity prevailed. In all the skirmishes occurring between the two races, more soldiers were killed than natives. At the end of July the Governor received information that an attempt would be made to drive away the settlers from Port Nicholson, and that to achieve this purpose the tribes from the Wanganui District would co-operate with those in the vicinity of Wellington. Rauparaha was supposed to be an ally of the whites since his meeting with Governor Fitzroy, but the settlers suspected his good faith and considered that he was aiding the insurgents. At last his intentions were made plain. A Mr. Deighton, one of the New Zealand Company's settlers, was at this time living at Wanganui, and was fortunate enough to obtain sight of a letter bearing the signature of Rauparaha, addressed to the inland natives up the River, strenuously urging them to rise and join the party which was harassing the settlers. He communicated the substance of the letter to the Police Magistrate at Wanganui, who, seeing its importance, proposed sending it to the Governor. A few days afterwards, a party of men, over two hundred

in number, with fire-arms and ammunition, appeared in the settlement, announcing their intention to go to Wellington to join their chief, who was associated with the party then busily pillaging the settlers. Deighton, learning their intention, told Mr. King that if he would write a despatch he would undertake to deliver it to Captain Grey, accompanying the natives in their journey to Port Nicholson.

The despatch was written with Indian ink on tissue paper, and sewn up in the collar of Deighton's coat. During their journey he was suspected of carrying letters to the Governor, and was in danger of losing his life in consequence; but, being searched, the despatch sewn in the collar of his coat eluded discovery, and on his arrival at Wellington he was enabled to deliver it to the Governor. Possessed of the proofs of the intention of the natives, the Governor, on the night of the 23rd of July, 1846, caused an armed force silently to surround the abode of Rauparaha, who was found asleep in his bed and conveyed on board *H.M.S. Calliope*, which was waiting in the Porirua Harbour for his reception. It is noticeable that the Authorities always allowed themselves considerable latitude in their dealings with questions in which Maori rights were concerned. Things were sometimes done, whether called for by the exigencies of the time or not it is for the judgment of history to say, that the agents would scarcely allow themselves to do had their opponents not belonged to the coloured races. The capture of Rauparaha is one of these, but it is just possible that in this instance there were adequate extenuating circumstances; the general statement may therefore be made here without any invidious effect. The cunning and adroit capture of the most celebrated living Maori warrior instructed the natives that they had now a Governor to deal with whose vigilance they could not hope to elude, and who was swift to execute the plans his sagacity had matured. The capture made a profound impression on Maoridom. Who could be safe if Rauparaha was outwitted and imprisoned? He was given the choice of standing a trial for treason, or of remaining in custody of the British, a prisoner of war. He wisely chose the latter alternative, and the Wanganui natives, after his capture, dispersed without delay to their homes. Shortly after their return to Wanganui, the troops marched on the *pah* of Rangihaeata, who left the position he occupied, broke up his war-party, and his followers retired to their own district.

Te Heu Heu, the great chief of Taupo, who had long refused his adhesion to the Queen, was, on the 7th of May, 1846, buried alive, with fifty-four of his followers, by a land-slip at Taupo, and the elements of discord in the native population, incident to the change of their condition in having to live under a settled form of Government, seemed to be disappearing one after another. The settlers having drifted into uneasy relations with the natives at Wanganui, a detachment of soldiers was sent to the district in December, 1846. A desultory warfare continued till the end of the year, when the natives, who were cut off from all communication with the sea, and their usual markets, wrote begging for peace, and on the 21st of February, 1848, the principal chiefs met his Excellency the Governor in the presence of Major-General Pitt, who was in command of the troops in the colony, and peace was ratified and a general pardon granted. This was the last occasion during the period Captain Grey was Governor that peace between the Europeans and natives was in any way disturbed, and the people of both races were left free to devote their energies to the development of the resources

of the country, and the building up of laws and institutions suited to the novel circumstances existing in the young colony.

Immediately on his first arrival at Wanganui, the Governor, while skirmishing was going on between the forces and the natives, received certain official despatches from the Home Government, by which he obtained the first intelligence that Parliament had bestowed a new Constitution on New Zealand, and that new modes of dealing with native land were to be adopted concurrently with the new institutions. The despatches, which had been already published in the *London Gazette*, contained language regarding the rights of the natives to their lands that was liable to be misunderstood, and similar language it appeared had been used during the debate in Parliament on the new Constitution, and had been republished in newspapers which arrived in the colony at the same time as the despatches. It seemed quite possible to the Governor, therefore, that the intention to deprive the natives of their lands, which appeared to be the new line of policy proposed for adoption, was, in the unsettled state of the country, likely to give rise to a general national combination among all the native tribes, and thus to result in a long-continued, destructive and costly war. For these, and possibly other reasons, the Governor thought it his duty to return to the Home Government the despatches, and the Charter which accompanied them, in order that the subject might be further considered in England, and also that delay should be obtained in the promulgation and enforcement of documents, which, it was to be feared, would, in their present unsuitable form, give rise to such serious calamities.

There were many thousands of armed men residing in the centre of the North Island, who were generically known as the Waikato tribes. At irregular distances along the sea-coasts were isolated and defenceless European settlements. The Tamaki District and the shores of the Manukau formed the road by which the northern and southern tribes went to wage war with one another, and the Governor resolved to occupy this highway of armed men, which was close to the seat of Government. When Kororareka was destroyed, Auckland became panic-stricken at its defenceless condition, and now in the time of peace the occasion seemed opportune to make provision for its permanent safety against attacks from the south. To ensure this purpose the Governor obtained a number of discharged soldiers in England, who were enrolled for seven years' service in New Zealand, and stationed in four settlements around Auckland. The new force became known as the "New Zealand Fencibles," and it has been stated by a competent witness that all the old veterans thus humanely provided for who deserved success obtained it. Each man had a cottage built on an acre of land, which became his own, with a claim for five acres more on completing seven years' service.

The first detachment arrived in October, 1847, and in a few months this military colony, with the wives and children, numbered two thousand souls. On the 26th of February, 1848, Lord Grey writing to the Governor said:—"I have very great pleasure in communicating to you the information that Her Majesty has been pleased to approve of your being a Knight Commander in the civil division of the Order of the Bath, for the great ability and success with which you have administered the affairs, both of South Australia and of New Zealand." Two native chiefs, Waka Nene and Te Puni, were the squires on the occasion of the investiture. In April, 1848, the Ngatiawa tribe,

led by William King, with some six hundred followers, migrated from Waikanae, Cook Strait, to Taranaki, locating themselves on the south bank of the Waitara River, which had been from time immemorial their ancestral home. They had gone southwards earlier in the century by pressure from the Waikato tribes, and the desire to obtain land in the vicinity of Cook Strait, where the whale-ships brought guns and ammunition for barter.

After the Governor had arrived in New Zealand he received official advice that a sum of ten thousand pounds had been placed to his credit, to be applied to the purchase of native lands for the purposes of colonization. He was thus enabled to secure sites for the settlements of Otago and Canterbury, that were founded in the years 1848 and 1850 respectively. Otago was settled by the members of the Free Church of Scotland, and on the 22nd of March and the 15th of April, 1848, the first emigrant vessels, the *John Wickliffe* and the *Philip Lang*, arrived at Port Chalmers. Three vessels, with the first body of settlers, under the auspices of the Canterbury Association, the *Charlotte Jane*, the *Randolph* and the *Sir George Seymour*, arrived in Lyttleton Harbour on the 16th and 17th of December, 1850, and were received by the Governor, who was awaiting their arrival.

In July, 1850, the New Zealand Company gave their Charter of Incorporation back to the Crown. No clear statement of its financial affairs has ever been published, but the Company appears to have received nearly a million of money, all of which was spent save some thirty thousand pounds, and to have been indebted to the share-holders and the Government at the time of relinquishing their Charter, to the extent of some five hundred thousand pounds. The sum of two hundred and thirty-six thousand pounds owing to the Government by the Company was cancelled, and two hundred and sixty-eight thousand three hundred and seventy pounds was made a charge on the lands of the colony.

POLITICAL PROGRESS.

In 1852, a representative Constitution was granted to New Zealand under the Imperial Act, 15 and 16 Vict. c. 72. It was just about this time that the agitation in the same direction on the part of the mother-colony showed signs of being crowned with success. The long-continued and reiterated representations of the colonists on the subject had at length begun to produce some effect on the Colonial Office, and public opinion in England was being rapidly educated up to recognizing the right of people at the antipodes to govern themselves and make laws to suit their own local circumstances. Sir John Packington, the Colonial Secretary, was mainly guided by Sir George Grey's recommendations in framing the New Zealand Constitution. Six provinces were created—Auckland, Wellington, Nelson, Canterbury, Otago and Taranaki—the Governor defining their boundaries. Superintendents were to be elective, but the Governor had the power to veto the Bills passed in the Provincial Assemblies. The first election took place in 1853. The General Assembly was to consist of the Governor, a House of Representatives, composed of thirty-seven Members, and a Legislative Council, to consist of fourteen persons, the right to nominate all of whom was vested in the Crown.

Sir George Grey distinguished his term of rule by remarkable zeal in the public service. He arrived in the colony at thirty-three years of age, full of activity, and fresh from his experience as Governor of South Australia. He had already earned a name

for himself in Australian history by his services in connection with the work of exploration in Western Australia, where he received a spear-wound of which the effects remained. Captain Grey published an account of his travels in the interior which is one of the most remarkable contributions to the literature of the story of that once mysterious waste, rivalling the journals of Sturt for vivid word-painting and realistic descriptive power. He brought to New Zealand the same qualities of energy and zeal that first earned him the notice of the Colonial Office. He established many boarding-schools for the poor and the destitute children of all races in the South Pacific. There were separate establishments for boys and girls under the control of various religious bodies that had Missions in New Zealand, presided over by married persons who resided on the premises with the children. Supported by endowments, the pupils received an industrial training coupled with religious and secular instruction. They were especially taught English, with a view to making it the standard language of the Pacific; and as this supplemented the efforts of the Mission schools, the result was that in a very few years many of the native population of the younger generation



CHRISTCHURCH IN 1852.

could read and write, and had the advantage of being trained in European habits.

Endowed hospitals were also established in various parts of the colony, on the same principle of being open to all races in the Pacific Islands. His Excellency also devised a constitution for the Church of New Zealand, which has since been adopted in Canada and Ireland. The fact that he had originated the frame-work of the constitution of the New Zealand Church was made known only by the statement of Bishop Selwyn when he was leaving the colony to return to his diocese of Lichfield, in 1867. Sir George Grey left the colony on the last day of the year 1853. Since the Wanganui trouble in 1842, peace had prevailed all over New Zealand. The European population, which numbered twelve thousand seven hundred and seventy-four in 1845, had increased in 1853 to thirty thousand six hundred and seventy-eight souls. The revenue in 1845 was twelve thousand eight hundred and ninety-nine pounds; in 1853 it amounted to one hundred and forty-seven thousand eight hundred and twenty pounds. His wise and steadfast rule brought prosperity to the country and he left it in peace. On his arrival in England he was made a "D.C.L." of the University of Oxford, and the demonstrative undergraduates, when the title was conferred, gaye a round of cheers for the "King of the Cannibal Islands."

Upon Colonel Wynyard of the Fifty-eighth Regiment, as senior military officer, devolved the Government of the country on the departure of Sir George Grey. He had lately been elected Superintendent of the province of Auckland, and, according to

the Secretary of State, should have resigned the Superintendency when called upon to administer the Government of the colony. By a proclamation dated on the 18th of January, the General Assembly was called together on the 24th of May, 1854. Mr. Charles Clifford, of Wellington, was elected Speaker of the Lower House, and Mr. William Swainson, the Attorney-General, appointed to preside over the Council. As soon almost as the Assembly met, a difficulty arose, as there was no provision laid down in the Constitution Act for what was called Ministerial responsibility, the Act having left it open for the colony to choose the form of its Executive Government. The offices of Colonial Secretary, Treasurer and Attorney-General were held from the Crown, and their holders formed, with the Governor, the Executive Council of the colony. To the demand for responsible Government, Colonel Wynyard replied by adding to the Executive Council Messrs. Edward Fitzgerald, Henry Sewell and Frederick Aloysius Weld, who were influential Members of the House of Representatives. But this arrangement did not work smoothly. Misunderstandings arose between the Executive Officers holding their appointments from the Crown, and the popular Ministers, who resigned, and were succeeded by Messrs. Thomas Spencer Forsaith, Edward Jerningham Wakefield, William Thomas Locke Travers and James Macandrew.

The mixed Cabinet, however, did not work satisfactorily, as more than one Ministry resigned office before the 16th of September, on which date the Assembly was prorogued. An address to the Governor expressed a willingness of the House to grant supplies to a Government conducted by the old Executive Council until instructions were received from England respecting Ministerial responsibility; and on this understanding several Bills became law, the most important of which gave the Provincial Councils the management of the waste-lands of the several provinces. Next year the Assembly commenced business on the 8th of August, when the officer administering the Government informed the Assembly that Her Majesty's Ministers had no objection to the establishment of responsible Government, provided the Colonial Secretary, the Colonial Treasurer and the Attorney-General were pensioned; and that no enactment was necessary for the formation of responsible Government, as the practice rested on usage only. Colonel Gore Browne, who was to succeed Sir George Grey as Governor, arrived in Auckland on the 15th of September, and prorogued the Assembly. Colonel Wynyard's Administration, extending over some twenty months, was alike peaceful and prosperous, no events of special moment marking his term.

A new Parliament was chosen, after the sittings of two years, to enable the people to elect Members from whom responsible Ministers could be chosen; it met at Auckland in May, 1856. Colonel Browne visited, in the recess, the settlements of New Plymouth, Nelson, Wellington, Canterbury and Otago, and found the European population, which numbered some forty-five thousand souls, busily and profitably occupied. The revenue of the colony was one hundred and eighty-five thousand pounds, while when Captain Fitzroy left New Zealand, it was only twenty-six thousand six hundred and forty-five pounds. This was an unmistakable indication of prosperity. In the new House of Representatives, Mr. Clifford, of Wellington, was again chosen Speaker, and three Ministries, between the 7th of May and the 2nd of June, succeeded one another. The first passed a Pension Bill, giving to the officers appointed by the Crown two-thirds of their



AUCKLAND HARBOUR FROM CEMETERY GULLY.

salaries as retiring allowances, leaving the politicians a clear field for their exercise of "Ministerial responsibility." The third Ministry, known as the "Stafford," held office for more than five years, and left a permanent influence on the future history of the colony. The Assembly, on its first meeting in

1854, soon made manifest the fact that the politicians were divided into two parties, called the "Centralists" and the "Provincialists;" or those who wished the General Assembly

to have control over all affairs, while the "Provincialists" desired that the general and local functions of the colony should be relegated to the Provincial Councils. Mr. Stafford, who formed the first permanent Ministry, was a "Centralist," but he held no office himself for six months after its formation in June, 1856, until the November following, when he became Colonial Secretary. Mr. Stafford and three practicing lawyers divided the portfolios among them, the lawyers being Messrs. Whitaker, Richmond and Sewell. For ten years the colonists had been clamouring for "responsible Government," being desirous of escaping from the control of the Colonial Office. It was now to be seen what they would do with it. Thomson tells us how, before leaving England, Colonel Browne had an interview with Lord Elgin, the ex-Governor General of Canada, who impressed upon him the easy life a Governor led who reigned over a colony and left the ruling part of it to responsible advisers, and it appeared that Colonel Browne intended to follow Lord Elgin's advice. But the "responsible Ministry" of 1856 was clogged with one restriction which threw the most troublesome portion of the Government of the colony on the Governor. The purchase of land, and the laws, and all things specially affecting the natives, were to be regarded as matters of Imperial concern, and, as such, under the Governor's especial control. Ministerial responsibility did not yet include responsibility in native affairs. Such were the circumstances under which responsible Government was brought into operation.

THE NATIVE DIFFICULTY.

About the time when the General Assembly first met in Auckland, and the Government of the colony was given into the hands of the colonists, there arose in the native mind two desires. One was to provide a local form of Government for the race; the other was to discountenance the sale of native lands. Both were regarded by the ruling colonists as inimical to the welfare and progress of the colony. The native race wanted leading rather than restraint, and Governor Browne was quite unable to direct the "king movement" whither it should have been led. Early in his term of office it began to expand, and though he arranged with his Ministers that he should remain responsible for native affairs, he saw only with their eyes and followed their advice, because he had no other knowledge or experience to guide him in cases of perplexity. The responsibility remained with the Governor, but the control of events rested mainly with his Ministers, who began to sap the power that was divided.

In May, 1857, a Maori meeting was held on the banks of the Waikato River, when Te Wherowhero, who had written to the Queen on the death of Governor Hobson, was elected King under the style of "Potatau, King of New Zealand," and the flag given to the natives by William the Fourth was hoisted as a symbol of his sovereignty. The object of the movement, which was directed by a chief of great intelligence named William Thompson, was to obtain law and order, and to replace the power of the chiefs which the advent of the Europeans had almost destroyed. The importance of this movement was at once recognized. "If the Government," wrote Governor Browne when reporting this meeting to the Secretary of State, "does not take the lead and direction of the native movement into its own hands, the time will pass when it will be possible to do so." In the following year, 1858, he held a different

opinion; as when writing to the Colonial Office he said, "I trust that time and absolute indifference, and neglect on the part of the Government, will teach the natives the folly of proceedings undertaken only by the promptings of vanity and instigated by disappointed advisers." It was not long before his language took a more decided tone, and it became the custom to speak of the Maori desire for a king as a treasonable combination.

Meanwhile, a number of acts on the part of the Europeans seemed to indicate whither events were tending. The first Ordinance enacted by Governor Grey on his arrival in New Zealand was to regulate the importation and sale of arms. This Ordinance was repealed in 1857, and shops for the sale of warlike stores were opened by Europeans in different settlements. The natives purchased many thousand stand of arms, and large quantities of ammunition; ten years of peaceful prosperity having made them comparatively rich through supplying the Europeans with produce. Thompson, who was a careful observer of what took place, says "every vessel from Australia brought cheap guns for the Maori trade."

The session of 1858 was indicative of the latent native policy of the Government. It was so hostilely dealt with by the Legislative Council that it was passed only under the threat of Ministerial resignation. Early in 1859 the Governor visited the settlement at New Plymouth, when he declared to the natives that it was his intention to adopt a new policy in the purchase of native lands, and to treat with individual claimants, disregarding tribal rights and the influence of the chiefs; in other



WILLIAM THOMPSON, THE MAORI KING-MAKER.

words, to impress the English land system of the nineteenth century on a race whose customs regarding land resembled in a great measure those in vogue among the Irish people under the Brehon traditions. When the new policy of land-purchasing was introduced by the Governor, upwards of thirty million acres had been obtained from the native owners for purposes of colonization, of which not more than a quarter of a million were

under cultivation. The people of Taranaki considered they were straitened for room to expand, and wanted an extension of territory towards the mouth of the River Waitara, and an individual native was put forward to sell a portion of the tribal estate to the Government. A Maori named Teira offered the Governor a block of land at Waitara for sale; it was some six hundred acres in extent, and endeared to the owners by historical recollections, being the first landing-place of the tribe some twenty-five or thirty generations previously. Areas had consequently been allotted by their ancestors or the heads of different families, and subdivided into allotments for different persons. Each allotment was marked out by natural or artificial boundaries, and each family knew what belonged to itself and what to others. The chief of Waitara, William King, acting as the representative of the tribe, opposed the sale, telling the Governor personally that this land should not be sold, but kept as an inheritance for the tribe. The Governor, however, reported to the Secretary of State that while he did not fear that William King would continue to maintain his assumed right, he had made every preparation to enforce obedience should he presume to do so. William King did, however, maintain his right, and from these events sprang the Taranaki War of 1860, which lingered until May, 1861, and resulted in nothing except the temporary ruin of Taranaki.

On the 23rd of the month the Governor was informed that he would be superseded by Sir George Grey, of whom the Secretary of State said, "he should be neglecting a chance of averting a more general and disastrous war if he neglected to avail himself of the remarkable authority which will attach to his name and character as Governor of New Zealand." Sir George Grey landed at Auckland on the 26th of September, 1861, and on the 3rd of October following Colonel Gore Browne left the colony. The new Governor found the natives confident in their united strength of being able to cope with the European settlers, as through the late conflict they had, by skilfully devised retreats, almost uniformly succeeded in evading defeat, while the damage their warlike and predatory habits inflicted on the settlers was of a most distressing kind. War to a Maori was little more than an occasional interlude in his ordinary life, while to the West of England men by whom the New Plymouth settlement was largely peopled, it was a disruption of all their social and business relations. Nor would the Colonial Office regard with any satisfaction the cost of the conflict, which Sir George Grey found to have amounted to eighty-seven thousand pounds. The Duke of Newcastle became accustomed to write of the conflict as the "Settlers' War." One good result of the change of Governors made itself apparent. Colonel Browne had directed that preparation should be made for commencing a war against the Waikato tribes, who had, from their intercourse with the settlers, acquired a general coating of civilization. They had schools and school-masters, places of worship and religious teachers, fenced and tilled lands, and agricultural implements and appliances diffused over a wide area. Sir George Grey, who had been charged some fifteen years before with carrying the spirit of peace into the councils of war, now considered it wiser to establish peace and order than to carry slaughter into such districts.

The Stafford Ministry had fallen in July, 1861, and was succeeded by an Administration formed by Mr. Fox, who had been an *employé* of the New Zealand Company, and an active agent in the agitation that was fostered among the colonists to promote

the establishment of what they called responsible Government. Mr. Fox had long been a political opponent of the Governor. By the commencement of November, 1861, Sir George Grey had formulated a scheme for the local Government of the race, under the provisions of which he proposed to utilize the authority and capacity of the native chiefs, in conjunction with European police magistrates, in making and maintaining laws affecting the social welfare of the Maori. He believed that if a local form of Government of the character indicated were introduced into native districts the causes of contention between the Maori

people and the Legislature would be considerably lessened.

Early in his second Government he determined that the division of authority between the Governor and Ministers should be abolished, and that upon native, as on other affairs, the Governor should rely on



MAORI CANOE OBSTACLE RACE.

the advice of his Ministry; and on the 30th of May, 1862, Imperial control over native affairs was abandoned.

Ever since his return to the colony, his Excellency had regarded with suspicion the purchase of the Waitara block, over the possession of which so much blood and treasure had been expended. Having caused the title to be carefully examined, he learned to his surprise that the land had never been obtained from its rightful owners, and that even the full amount of the purchase-money promised to the seller had not been paid. Teira, from whom the Government claimed the right to occupy, subsequently avowed that he had no right to sell, and the whole transaction on his part appears to have been a device to obtain satisfaction for a slight put upon him by William King in a private quarrel. The actual merits of this case had been laid bare in a decisive speech by Mr. T. S. Forsaith in his place in the Assembly, in 1860—a speech which led to the defeat of the Ministry of that day. The Governor now accepted the position, and the claim of the colony to the land was renounced by proclamation on the 11th of May, 1863. On the 4th of June following, hostilities were recommenced in the province of Taranaki, and the wider area of the Waikato and portions of the east coast became involved in an insurrection of the native tribes who were desirous of measuring their strength against the Europeans. A narrative of these wars in a connected form will be given later on. It may be here stated that while they resulted in the subjugation of the natives, they had for a time a disastrous effect upon the colonization of the North Island. The Domett Ministry, which succeeded to office in August, 1862, proposed in the year following, when the insurrection was evidently spreading, to establish military settlements on native lands owned by insurgent tribes. The confiscation of land was an

idea familiar to the native mind, as a tribe worsted in conflict often suffered a loss of tribal estate as a consequence of defeat. So well was this mode of punishment understood by both races, that when the missionaries, who had much influence in the Bay of Islands, proposed, in 1838, the confiscation of the lands of a Maori malefactor, they found the other natives approving of the suggestion, and aiding its enforcement. In the outbreak of Heke and Kawiti, in 1845, the Rev. H. Williams and Mr. G. Clarke both advised the Governor to confiscate the lands of the insurgents. Insecurity of office, however, prevented the Domett Administration from confiscating land. A Whitaker-Fox Ministry came into power at the end of October, 1863, and the "New Zealand Settlement Act" was passed in the December following. Under its operation three million eight hundred and eighty-four thousand four hundred and thirty-seven acres were confiscated in the provinces of Wellington, Taranaki and Auckland; and, though the Imperial Government looked askance at the Enactment, it was affirmed.

In November, 1864, the seat of Government was removed from Auckland to Wellington, Cook Strait, in consequence of an agitation for a more-central position from which to direct the Administration of the colony, there being at that period very few telegraphs, and indifferent and irregular communication by sea. In July, 1866, the Governor announced the cessation of the war, and in the November following Sir G. F. Bowen was appointed Sir George Grey's successor. With Sir George Grey's term of office the personal authority of the Governors of New Zealand may be said to have ended, and Ministerial responsibility to have been fully established. When Sir George Bowen commenced his term of Governorship in February, 1868, the Ministry was presided over by Mr. Stafford, who succeeded Mr. Weld, the latter having held office as Premier for about eleven months. In June, 1868, an outbreak took place among the natives, led by Titokowaru, on the west coast of the North Island, resulting in what was known as the "West Coast Campaign." During the month following some political prisoners confined on the Chatham Islands, led by Te Kooti, effected their escape in a schooner named the *Rifleman*, and, proceeding to the east coast, commenced a guerrilla warfare which continued two years before it was brought to a conclusion. Among the terrors of this warfare was the "Poverty Bay Massacre," on the 9th of November, 1868, when twenty-nine Europeans and thirty-two natives were murdered. On the 12th February, 1869, eight people were massacred at the White Cliffs, in the province of Taranaki; the Rev. John Whitely, a Wesleyan preacher, being among the number.

THE PUBLIC POLICY.

In June, 1869, Mr. William Fox became Premier, having Mr. Vogel associated with him as Colonial Treasurer. The colony had felt the war acutely, and the North was somewhat exhausted by the strain placed upon its capacities. Mr. Vogel, however, in the session of 1870, initiated a new departure in the policy of the country, founded on the belief that the natives could be more easily dealt with by constructing roads and railroads, and by the increase of European population by immigration, than by the old recognized modes of procedure, while the whole colony would be beneficially affected, he maintained, by the stimulus of the money borrowed for the purposes indicated. He proposed to obtain six million sterling by way of loan for defence, immigration, public

works and other purposes. His policy was almost unanimously adopted, and the colony entered upon its career of public works and immigration. At the end of the year 1870, New Zealand contained a European population of two hundred and forty-eight thousand, having increased threefold in number since the commencement of the Taranaki War in 1860. The revenue at that date, which was four hundred and sixty-four thousand pounds, had expanded in the next ten years to one million three hundred and eighty-four thousand. Exports and imports had a corresponding increment, and land under cultivation, sheep, and horned cattle, had increased sevenfold. From the date of the acceptance by the Legislature of Mr. Vogel's proposals, in August, 1870, to October, 1877, the Administration of the country continued in the hands of the same persons, though some seven different combinations gave cause for a corresponding change in the nomenclature of Ministries. The public debt, which in 1870 amounted to seven million eight hundred and forty thousand pounds, or thirty-one pounds per European inhabitant, in 1877 had risen to twenty million seven hundred thousand pounds, or fifty pounds per European inhabitant; but the borrowed money had, among other things, enabled the Government to construct over a thousand miles of railway. Meanwhile, Sir James Fergusson and the Marquis of Normanby had respectively succeeded Sir George Bowen as Governors, and the provinces, as institutions of the colony, had been abolished.

In 1875, Sir George Grey entered the arena of colonial politics, and in October, 1877, succeeded in ousting an Administration led by Major Atkinson, that had earned for itself the name of "Continuous." He formed a Ministry composed mainly of young men of great ability, and succeeded in holding office for two years. As a noteworthy ripple on the stream of public life, it may be mentioned that Sir George Grey had as a colleague a Mr. John Sheehan, who was the first native of European parentage elected as a representative of the people to the Parliament of New Zealand. His capacity and aptitude for public business afforded evidence of the swiftness of the current of events, the youth of the colony being now qualified not only to take part in its councils but to assist in controlling the public business and policy of the country.

The Government having confiscated in 1864 more land than the settlers could utilize, a portion of the alienated territory remained unoccupied, and in the province of Taranaki fell into the possession of the original owners, who built houses, made cultivations, and exercised other rights of ownership thereon. A promise had also been given to the Maori



SIR WILLIAM JERVOIS.

residents of Taranaki that the Government would give them a certain sum per acre as a *solatium* for the confiscation of their land, and as time passed and the occupiers remained undisturbed, actual ownership and exclusive possession were at times somewhat offensively asserted. Religious fanaticism gave cohesion to the occupiers of the confiscated lands in Taranaki, and caused them to gain adherents from many places, until a large settlement became established in the Ngatiruanui country at a place called Parihaka, under the leadership of a Maori called Te Whiti. In 1881, on the anniversary of Gunpowder Plot, the Colonial Forces, under the command of Colonel Roberts, invested the Maori village, took prisoners the two leaders of the movement, Te Whiti and Tohu, dispersed the residents, and destroyed their habitations. In the absence of Sir Arthur Gordon at Fiji, the Ministry of the day carried out the dispersion by methods which his Excellency disapproved of, as he considered them of an illegal character.

This was the last occasion upon which the peace of the colony was in danger of being broken by the Maori people, all the tribes having either become reconciled to the dominion of the European race, or lacking the power and desire to organize a resistance. In the census of March, 1886, there were forty-one thousand six hundred and twenty-seven Maoris and half-castes living as members of Maori tribes; while in 1858, when the first Maori census of the colony was taken, their numbers were declared to have been fifty-six thousand and forty-nine. These figures are those officially furnished by the Government.

The State has for many years been active in devising expedients to improve the condition of its people. In the year 1869 an Act was passed enabling the Government to grant life assurances and annuities on the security of the colonial revenue, and the Government Insurance Department is now one of the most prominent institutions in the State. In 1873, there was founded the Public Trust Office, by which it was sought to ensure the faithful discharge of trusts, to relieve persons from the responsibilities of trusteeship, and to substitute a permanent officer of the Civil Service in place of guardians. The office grows yearly in favour with the public. The Government of the colony always manifested a reluctance to divert any of its revenues from colonizing works to costly schemes of coastal defence. New Zealand was more backward in this respect than any of the Australian Colonies, and it is probably due to this fact that the Imperial Government, in January, 1883, appointed Sir William Jervois Governor of the colony. His Excellency, by lectures and personal influence, aroused public attention to the risk which New Zealand would run in the event of an European war, and under his direction the chief ports have been strongly fortified and furnished with effective battery and torpedo defences. As a result of the native wars, there is at the present time a large military element in the population, and New Zealand is now one of the best equipped of the Australian colonies for putting down any insurrection that may arise within its own borders, and also for repelling any attack of foreign foe.

HEKE'S WAR.

The first serious outbreak on the part of the Maoris, after the proclamation of British sovereignty, took place in the Bay of Islands District in March, 1845, and led to an intermittent warfare of ten months' duration. From the name of the insurgent

chief it has become known as "Heke's War." It was the immediate consequence of local discontents arising out of the removal of the seat of Government from Kororareka, coupled with an impatience of the restraints incidental to the assertion of civilized authority among a warlike and high-spirited people. Coincidentally with the rise of Auckland, trade began to decline rapidly at the older settlement. The imposition of customs duties, by still further discouraging trade, intensified the depression. But native sensibilities were wounded more deeply by the interdiction of free traffic in land, and the promulgation of the Crown's right of pre-emption.

These enactments carried to their minds the first direct intimation that they were in a subservient position, and that the paramount power of their own chiefs had been superseded. To cap all, the foreign demand for the staple products of timber, flax and kauri-gum fell off very materially. Money became scarce, tobacco, blankets and ammunition were hard to procure, and the Government that forbade the sale of Maori lands to private persons had not the means of purchasing much itself. Finally, the passion of tribal jealousy was stirred into activity in the breasts of the malcontents. They perceived with chagrin that the trade which was now so rapidly disappearing from them had commenced to enrich their bitterest enemies—the Waikato and Ngatiwhatua tribes—who were settled in the neighbourhood of Auckland.

A crisis was fast approaching, and with the hour came the man. Hone Heke, though not a chief of the highest rank, had won a position for himself among the martial and Ngapuhi tribe by his marriage with the daughter of the celebrated Hongi—the Napoleon of early New Zealand—and also by his own masterful talents. Deeply imbued with patriotic feeling, emulous of the fame of his great relation, and of a pragmatism of mind, he gradually acquired considerable influence with both Maoris and Europeans. Baptized a Christian, and appointed a lay reader of the Church of England, his intellectual ability and love of argument led him to contest after a time some of the tenets he had embraced, and he soon came to be regarded as an apostate from the faith. Superadded to his other qualifications, he was possessed of a faculty for diplomacy and a spirit of indomitable courage that eminently fitted him to act as a leader of his tribe. As early as 1841, he had gathered round him a party of followers, chiefly young men, who yielded him implicit obedience. Backed up by these, he constituted himself a kind of champion for the redress of Maori grievances; and, in some instances, acted as arbitrator between Europeans in their private quarrels. It was but natural, therefore, that such a man should take deeply to heart the declining prosperity



HONE HEKE.

of his tribes-men, and the encroachment of the alien race upon the hitherto irresponsible authority and privileges of the aboriginal chiefs. His growing disaffection was fomented by some of the white settlers, a few of whom, being of other nationalities, pointed to the British flag which had been erected on the hill of Maiki, overlooking Kororareka, as the symbol of the new order of things and the sign that the *mana* (authority) had departed from the chiefs. To the superstitious minds of Heke and his followers it was invested with the significance of all that was distasteful to them, and they became convinced that if it were only removed the good old days that they now so much lamented would magically return.

Early in July, 1844, a trivial circumstance precipitated the first overt act against British authority. A Ngapuhi woman, married to a European resident at Kororareka named Lord, cursed Heke and called him a pig. Heke forthwith collected a hundred men, marched to the settlement, plundered Lord's house and carried off the woman to his own place at Kaikohe. Lord offered a cask of tobacco for her return, and as *utu*, or payment, for her conduct. Heke promptly sent her back, but Lord declined to fulfill his share of the transaction. The enraged chief again repaired to Kororareka at the head of an armed force, spent Saturday and Sunday in pillaging several stores and menacing the settlers, and on Monday morning, the 8th of July, mounted the hill and cut down the obnoxious flag-staff, carrying away the signal-balls with him to Kaikohe. The news of this act of open defiance was received in Auckland with dismay. There were only a hundred or so of troops in the entire colony, not a single defensible position, and a scarcity of munitions of war, while the primitive respect of the natives for the power and determination of the white man had been rudely shaken by the immunity enjoyed by the perpetrators of the "Wairau Massacre" in the preceding year.

Governor Fitzroy saw clearly, however, that to hesitate or temporize would be suicidal, and therefore dispatched thirty men of the Ninety-sixth Regiment to Kororareka. He also made application to Sir George Gipps (Governor of New South Wales) for immediate re-inforcements. In prompt response to this urgent request, one hundred and sixty men of the Ninety-ninth Regiment arrived from Sydney, and these, with a detachment of fifty men of the Ninety-sixth Regiment from Auckland, and two light guns, disembarked at Kororareka, the entire force being under the command of Lieutenant-Colonel Hulme, of the Ninety-sixth. *H.M.S. Hazard* followed with the Governor and fifty seamen and Marines under Commander Robertson. While preparations were being made for the operations against the rebel chief, the Governor held several meetings with the natives, and finding out that the customs duties were a cause of very general dissatisfaction, took upon himself the responsibility of closing the Custom House and declaring Kororareka a free port. The troops had been moved to the mouth of the Kerikeri River, and they were about to march inland to Kaikohe, when Mr. George Clarke (Chief Protector of Aborigines) arrived from Waimate, bearing a message from an assemblage of the principal Ngapuhi chiefs desiring that the troops should not be landed at Kerikeri, acknowledging Heke's culpability and undertaking to be answerable for his future good conduct. They also solicited the favour of a conference. The Governor accepted the proffered compromise, and promptly met the friendly native chiefs at Waimate. They repeated their assurances, agreed that the flag-staff should be replaced;

and, as compensation for Heke's wrong-doing, offered to surrender some land or other property. The Governor would accept only ten old muskets, and even these he returned, while in compliance with the compact he ordered the withdrawal of the troops. In order to still further allay discontent, the Legislative Council in October arrived at the determination to permit the natives to sell land direct to settlers. Meanwhile, Heke all this time had been lying at Kaikohe a passive spectator of events. Resenting the engagement of the chiefs to keep him in order, and emboldened by the concessions that his



MANGONUI.

demonstration of force had wrung from the Authorities, he made up his mind to again hew down the flag-staff. Accordingly he repaired with his followers to Kororareka early in January, cut down the flag-staff by night, and after sending word to the magistrate that he would return in two months to destroy the Gaol and the Custom

House, and to send away the officers of the Government, he retired again to Kaikohe. A proclamation was at once issued offering a reward of one hundred pounds for the apprehension of Heke, and Heke retaliated by offering a similar sum for Governor Fitzroy's head.

In February, *H.M.S. Hazard* was dispatched to Kororareka with a musket-proof block-house to be erected at the flag-staff, and fifty men of the Ninety-sixth Regiment under two officers to garrison the small fortress. This time the new flag-staff was sheathed with iron, a stockade was constructed, some light guns were mounted, and the settlers were armed and drilled. Everything now presaged a stern conflict. A force of twenty soldiers, under Ensign Campbell, guarded the British flag. Commander Robertson, with forty Marines, was in charge of a gun commanding Matauhi Bay; half-way between the summit of the Hill and the beach stood the stockade, with two guns in front, and Mr. Polack's house on the beach was garrisoned with soldiers, Marines and settlers. Nor was Heke idle. He had emissaries travelling through the country as far north as Mangonui, and as far south as Whangarei, inciting the natives to rise. The chief Kawiti joined him with a large body of armed men, and other accessions followed. Early in March, Heke and Kawiti moved with their forces to the neighbourhood of Kororareka, and some acts of horse-stealing on their part led to an exchange of shots with the troops. Lieutenant Philpott of the Royal Navy was captured, but after being detained some time, and having one of his pistols taken from him, he was released and advised to be more careful of himself in future.

On the night of the 10th of March, Heke marched his forces towards Kororareka,

posted Kawiti, with some two hundred men, on the road leading into the settlement from Matauhi Bay, so as to cope with Commander Robertson and his detachment of Marines; and then, climbing the Hill, he lay down in ambush with about twenty men, only one hundred yards distant from the flag-staff. Before daylight on the 11th, Kawiti attacked Commander Robertson's position, and the noise of the firing having drawn Ensign Campbell and his men outside the block-house to ascertain what was going on, Heke and his braves bounded into the stronghold, shot the only soldier who had remained behind, and drove Campbell and the others in disorder down the Hill. Heke then proceeded to cut down the flag-staff. In the meantime, Robertson had been defending his position with great stubbornness, but when he saw the soldiers scampering down the Hill, he spiked his gun and also fell back to Mr. Polack's house on the beach, where the whole defensive force was now collected. Re-inforced by a party of sailors from the *Hazard*, which was keeping up an active cannonade, the settlers and troops defended themselves for three hours from the rebels, while the women and children were embarking on the vessels in harbour. After they had got safely off, the powder-magazine on shore exploded; and, the strength of the enemy being evidently overestimated, it was then decided to abandon the settlement. In astonishment at a contingency they had never anticipated, the insurgent natives saw the whole of the troops and inhabitants betaking themselves to Her Majesty's ship *Hazard*, the United States corvette *St. Louis*, the whale-ship *Matilda* and the schooner *Dolphin*. They offered no molestation, but, when the settlement was quite deserted they began to pillage. Some of the settlers ventured on shore again to secure valuables, and the natives, instead of exhibiting any blood-thirstiness, actually assisted them to remove articles to the beach. Children left behind in the confusion of flight were sent uninjured to their parents; and, earlier in the fight, the wife of the signal-man having been taken prisoner, she was forwarded by Heke under a flag of truce to the nearest British post. In fact, this chief, throughout the troubles, excited a sentiment of admiration by his chivalry and magnanimity. After the town had been looted, the greater part of it was given to the flames; but, by the order of Heke, the buildings at the southern end, comprising the English Church, the Roman Catholic Bishop's house and printing office, several warehouses (the property of Americans), and the Roman Catholic Chapel to the north, were preserved. During the engagement, Bishop Selwyn (Anglican), and Bishop Pompallier (Roman Catholic), succoured the wounded, and while the looting and burning were going on several of the missionaries visited the settlement with perfect freedom. One of them, the Rev. R. Burrowes, relates that he met one Maori with a bottle of lollies, from which he was regaling himself with great gusto, and that "the noble savage" offered him some of the sweetmeats.

In this affair at Kororareka, six seamen, four soldiers and one half-caste child were slain; and twenty settlers, soldiers and seamen were wounded. Amongst the latter were numbered Commander Robertson, whose thigh had been shattered by a bullet, and Lieutenant Morgan, both of the *Hazard*. It was computed that about thirty-four of the natives fell, and that between fifty and sixty thousand pounds' worth of property was destroyed. On the 13th of March, the vessels sailed with the soldiers and inhabitants for Auckland, where their arrival with the news of the evacuation of Kororareka created quite a panic. Barracks were built, block-houses hastily constructed, the settlers called

out for militia service, the windows of St. Paul's Church barricaded, and an earth-work was thrown up near the Roman Catholic Chapel, while an urgent appeal for troops was made to New South Wales. Like precautions for self-defence were taken at Wellington and Nelson. The effect of the fall of Kororareka upon the native mind was disastrous to British prestige. Heke's fame spread like wild-fire through both Islands, and respect for the military prowess of the English correspondingly declined. All sorts of sensational rumours kept the unfortunate settlers in a state of constant alarm. Heke was reported to have declared his intention of marching, with two thousand men, at the next full moon to Auckland, for the purpose of sacking it. In consequence of this alleged menace, Potatau Te Wherowhero, the chief of the Waikatos, and subsequently King, sent Heke the following warning message:—"Remain at your own settlement. This is my word: you must fight me (the Waikatos) if you come on to Auckland, for these Europeans are under my protection."

But Heke had other and equally strong reasons for staying where he was. Tamati Waka Nene, the most influential chief of the Ngapuhi, in accordance with the compact made with the Governor at Waimate, collected his followers at Hokianga and marched across to the Bay of Islands in order to take the field against his turbulent compatriot. Some of the missionaries tried to dissuade Waka from at once entering upon active hostilities, and at their advice he dictated a letter to the Governor intimating that he was ready. While awaiting a reply, he encamped at Okaihau, some four or five miles inland, and summoned other chiefs to his assistance. On the 1st of April, Heke, who had three hundred armed men with him, was strengthened by the arrival of one hundred and fifty natives



TAMATI WAKA NENE.

from Whangaroa, and the same day he moved on to Mawhe, a settlement distant about two miles from Okaihau, and began constructing a *pah* there. Heke had been manifesting some desire to effect a peace with the Authorities, but his hopes were frustrated by the commencement of skirmishing between his own forces and those of Waka on the 3rd of April, losses on both sides being the result. Further skirmishing took place on the 8th and the 15th of April, and on the 16th of April the majority of the Whangaroa natives left Heke and returned home. A sharp affray occurred on the 19th, and Waka, having learnt that troops had arrived from Sydney, wrote to the Governor urging him to send them on at once. His Excellency immediately complied with the request of his brave ally, and on the 28th of April, *H.M.S. North Star* and two trans-

ports entered the Bay of Islands, with three hundred soldiers of the Fifty-eighth and Ninety-sixth Regiments, and forty volunteers, under Colonel Hulme. On the 7th of May, this force, together with one hundred Marines and sailors under Captain Sir Everard Home, commenced their march towards Waka's *pah*. Five days previously, Sir Everard Home committed an act of reprisal which provoked much adverse comment. He took prisoner Pomare, an ally of Heke, while a flag of truce was flying, and burnt his *pah* to the ground.

On the 9th of May the campaign opened, the British officers being filled with contempt, both for their four hundred native allies and for their enemy, but the sentiment was destined to undergo a speedy and effective revulsion. Heke, on his part, quietly awaited attack, confident of his ability to cope successfully with troops whose power he and his braves no longer feared. His *pah* stood on a contracted plain, bordered on one side, and at the back, by a dense forest, and on the other side by a large lake. It was protected by two rows of wooden palisades, with a ditch behind them, the outer row of palisading being covered with flax. Heke had with him about two hundred and fifty men in the *pah*, and Kawiti, with one hundred and fifty men, was posted in ambush on a small rise within the verge of the forest. The allied forces advanced to within two hundred yards of the *pah*, and some rockets were discharged with no appreciable effect. The troops then began firing, while a friendly native named Hobbs led Lieutenant McLeary, and a detachment of one hundred men of the Fifty-eighth and the Royal Marines, towards the spot where Kawiti lay in ambush. Kawiti's forces, armed only with tomahawks mounted with long poles, met the attack with the greatest intrepidity. The soldiers then charged with the bayonet, and Kawiti retreated with a loss of twenty men. A sortie from the *pah*, led by a chief named Haratau, next engaged McLeary's force, and after a hand-to-hand conflict the natives fell back. The firing between the main body and the besieged was continued until sunset, when the allied forces were withdrawn to Waka's camp, the British having lost fourteen soldiers slain and thirty-nine wounded. So terminated the engagement at Okaihau. Colonel Hulme marched back to the Bay, re-embarked with all his forces for Auckland, and on arriving there assured his friends "that the force under his command was indebted to a merciful foe for its safe return."

The Governor sent to Sydney for more troops, and Heke, withdrawing to Ohaeawai, nineteen miles inland from Kororareka, proceeded to erect a strong *pah* there. Pending the arrival of these re-inforcements, Tamati Waka Nene kept the field, and frequent skirmishes took place between his forces and those of the enemy. In New South Wales Sir George Gipps and Sir Maurice O'Connell, K.C.B., the Commanding Officer, were exerting themselves for the dispatch of effective assistance, and early in June Colonel Despard arrived with two hundred men of the Ninety-ninth Regiment, while Major Wilmot brought some ordnance from Hobart. Colonel Despard was placed in command of an expedition, and on the 16th of June landed at the Bay of Islands, with a force of six hundred and thirty men and four guns: namely, two hundred and seventy men of the Fifty-eighth under Major Bridge, one hundred and eighty men of the Ninety-ninth, seventy men of the Ninety-sixth, eighty Auckland volunteers, thirty sailors from *H.M.S. Hazard* under Captain Sir Everard Home, and four guns in charge of Major Wilmot. On the

12th, Waka had engaged the enemy at rather close quarters and had repulsed them, Heke being wounded in the thigh while endeavouring to carry off his friend Kahakaha, and several other chiefs being placed *hors de combat*. The expeditionary force reached Ohaeawai on the 23rd. This stronghold stood in a clearing of the forest about five hundred yards square, and was very skilfully fortified. A square flank projected on each side, it was surrounded with three rows of palisades, between the inner and middle fences there was a ditch with traverses furnished with loop-holes, and inside the *pah* there were huts with bomb-proof excavations. Heke's forces numbered about two hundred



A MAORI CANOE RACE.

and fifty men, and were armed with single and double-barrelled guns, besides having two ships' guns. Active operations were commenced on the morning of the 24th with a cannonade from Major Wilmot's battery, but it seemed to make very little impression upon the *pah*. The three following days were uneventful. Colonel Despard wished to storm the *pah*, but was dissuaded by the strong representations of Waka and others. On Monday, the 30th, a thirty-two pound gun from *H.M.S. North Star* was placed in position and fired with some effect. Next day an unexpected sortie was made from the *pah* upon a breastwork held by Waka; a soldier in charge of the thirty-two pounder was shot at his post; and a British flag having been captured, it was hoisted underneath Heke's flag within the *pah*. This appears to have decided Colonel Despard to storm the *pah* the same afternoon, although Waka and other friendly chiefs urged that the attempt would be foolish until the thirty-two pounder had made a sufficient breach. Captain Marlow, senior engineer officer, was of the like opinion. At 3 p.m., one hundred and sixty men under Majors Macpherson and Bridge, and forty seamen and volunteers under Lieutenant Philpott, R.N. (a son of the Bishop of Exeter), paraded for this forlorn hope. They rushed on the *pah* at eighty yards, and amidst a deadly and continuous fire laboured with dauntless courage for fully ten minutes to make a breach

through the palisading. The outer lines were passed, but the inner fence being still intact, and two officers and half the men down, the bugle sounded the retreat. This ill-considered assault cost the British thirty-four killed and sixty-six wounded, among the slain being Captain Grant, of the Fifty-eighth, and Lieutenant Philpott, while Lieutenant Beattie, of the Ninety-ninth, was mortally wounded, and died within a few days after.

On the 3rd of July, the enemy hoisted a flag of truce and invited the British to remove their dead. For three days hostilities were suspended, and peace reigned in both camps. On the 7th, the besiegers resumed their cannonade, and kept it up for four days, besides taking care to prevent any supplies reaching the *pah*. During the night of the 10th, the *pah* was deserted. Heke withdrew to Ikorangi, ten miles away, and Kawiti proceeded to entrench himself at Ruapekapeka, sixteen miles inland. Colonel Despard destroyed the palisades and retired to Waimate, whence his forces returned to Auckland. The settlers felt that the military operations had again proved unsuccessful, while the Maoris, who appraise the issue of a conflict only by the relative numbers of the slain on either side, and attach no importance whatever to the desertion of a *pah*, marvelled at the prowess of Heke. His runners went all through the North saying, "One wing of England is broken, and hangs dangling on the ground."

Four months passed away, and Governor Fitzroy was about to resume the war when he learned that he had been recalled. In November, 1845, Captain Grey, the new Governor, arrived from Adelaide by the ship *Elphinstone*, and at once repaired to the Bay of Islands, where seven hundred troops were assembled. He wrote to Heke and Kawiti, offering them the same terms of peace that had been tendered by his predecessor. The insurgent chiefs replied with a distinct refusal to submit to any terms which included the forfeiture of land. Fresh troops had now reached the Bay; and, on the 22nd of December, Colonel Despard set out for Ruapekapeka with a force of one thousand one hundred and seventy-three Europeans, consisting of the Fifty-eighth Regiment under Lieutenant-Colonel Wynyard, detachments of the Ninety-ninth, the Royal Artillery, the Royal Marines, the East India Company's Artillery, and the Auckland Volunteers under Captain Atkins. In addition, there were thirty-three officers and two hundred and eighty seamen from *H.M.S. Castor*, *North Star* and *Racehorse*, and H.E.I. Company's ship *Elphinstone*, as well as four hundred and fifty natives under Tamati Waka Nene, Mohi Tawhai, and other Ngapuhi chiefs. A native detachment under Macquarie, a friendly chief, made a feigned attack upon Heke at Ikorangi, so as to keep him employed while the main body of the allied forces concentrated its strength upon the reduction of Kawiti's fortress at Ruapekapeka.

This *pah* has been pronounced a masterpiece of Maori fortification, and the plans of it, now lying among the archives of the Auckland Museum, still compel the admiration and surprise of military experts. The bombardment began on the 31st of December, and on the 2nd of January the natives under Waka repulsed a sortie, and on the night of the 10th Heke arrived with seventy men. Finding the provisions exhausted and the defences partly destroyed, he determined to abandon the place. He withdrew his forces in security accordingly, but Kawiti remained. On the Sunday, he withdrew his men from the *pah*, in order to conduct Divine Service out of the range of the artillery. One of the native allies, who was serving as a scout, gave the signal that the *pah* was empty,



ROAD ON THE TEREMAKAU.

and the British rushed in. The Maoris made a desperate attempt to recapture the *pah*, but were driven back. The British lost thirteen killed and thirty wounded. After the fall of Ruapekapeka the rebel forces, through lack of provisions, began to disperse, and Heke therefore wrote to the Governor proposing peace. His Excellency, perceiving that the time was now opportune for an honourable reconciliation with a fallen enemy, responded with the proclamation of an unconditional pardon to all who should quietly return to their homes; two hundred soldiers were left at the Bay of Islands and the remainder recalled to Auckland.

Thus ended the first and only war between our people and the natives of the district north of Auckland. Thanks to the chivalrous character of Heke, it was singularly free from acts of barbarism. Still, there is the grave suspicion of one act of wanton cruelty at Ohaeawai. On the night after the unsuccessful assault upon that *pah*, it is said that the chief Pene Tauī lit a kauri-gum fire on the breast of a wounded soldier, and that his cries of anguish were heard in the British camp. In Judge Manning's book, however ("History of the War in the North of New Zealand"), the Ngapuhi chief who supplied the narrative says: "As the people were mending the fence by torch-light, there was a dead soldier lying near, and they put a torch of kauri-resin on the body to light their work, which burnt the body very much, and caused the report to be spread afterwards, when the body was found by the soldiers, that the man had been tortured; but this was not true, for the man was dead before the fire was thrown on the body." On the same night a *tohunga*, or priest, caused the dead body of Lieutenant Philpott to be scalped, and a portion of the hip to be cut from Captain Grant's corpse, to be used in divination for the purpose of ascertaining how the war would end. These acts appear to have been committed without the knowledge of Heke.

Shortly after the termination of the war, Heke met and breakfasted with the Governor at the residence of one of the missionaries (the Rev. R. Burrowes), who had arranged the meeting at his Excellency's request. The chief was ailing at the time; he fell into a slow decline, and some four or five years later he died of consumption. Kawiti survived him by some years, and gave no further trouble to the Authorities. Tamati Waka Nene received a pension of one hundred pounds per annum for life, and lived at Kororareka, now Russell, until his death in 1871. The monument, raised by the Government over his grave, bears an inscription setting forth that it was erected to the memory of this chief of the Ngapuhi—"sage in counsel, renowned in war"—by the Government of New Zealand, which he was the first to acknowledge, and which, for upwards of thirty years, he had faithfully served.

THE HUTT DISTURBANCES.

Hardly had peace been re-established in the extreme North, than the smouldering embers of disaffection in the far South of the same Island were fanned into flame. The trouble there was agrarian. Colonel Wakefield alleged that he had purchased the fertile valley of the Hutt, nine miles from Wellington, on behalf of the New Zealand Company, but some of the principal chiefs who had interests in it maintained that they had in nowise been consulted in the transaction, and refused to waive their rights. Governor Fitzroy paid over three hundred pounds to the chief Rauparaha for the purpose of

extinguishing these native claims, but Rangihaeata—author of the “Wairau Massacre”—contending that he had not received his fair share of this money, resorted to acts of intimidation. Early in 1846, seventeen settlers of the Hutt were plundered, and Colonel Hulme marched three hundred soldiers up the Valley in order to punish the delinquents. They withdrew to an impregnable *pah* in the adjacent hills, difficult of approach, and two hundred soldiers were therefore left in the Valley for the protection of the settlers.

Meanwhile, Governor Grey collected all his available forces in Auckland, and took them with him to Wellington in 1846; six hundred and eighty men, with two guns and two howitzers, were now posted in the Hutt, and offers of assistance were received from friendly native chiefs. The troops were directed to prevent the supply of provisions to the enemy, and the latter found it necessary therefore to retire still farther into the interior. About the middle of April they eluded the soldiers, made a successful foray into the Hutt, murdered a boy and an old man named Gillespie, and declared that every occupant of the disputed lands would be served in a similar way. As Rangihaeata was the reputed leader of the lawless party which committed this outrage, two hundred soldiers were sent to garrison a stockade at Porirua, seventeen miles from Wellington, and in close propinquity to the chief's fastness. An hour before daylight on the 16th of May fifty soldiers of the Fifty-eighth Regiment, stationed under Lieutenant Page at Boulcott's farm, in the valley of the Hutt, were surprised by seventy natives under Mamaku, and six soldiers were slain and four wounded. Athwart the gloom of this tragic occurrence the simple and yet lofty heroism of a bugler boy named Allen sheds a light akin to that of poetic romance. Struck with a tomahawk on the right arm while about to sound the alarm, with undaunted spirit he raised the bugle with his uninjured left-hand and blew a blast that roused his comrades, but cost him his own life, for the next moment he was felled to the earth with a deadly blow.

The impunity with which this incursion was made stimulated the hostile natives to further attempts of a similar kind. On the 16th of June, just a month later, a reconnoitring party of forty soldiers of the Ninety-ninth, under Captain Reed, was attacked in the Hutt, with the result that two men were killed and an officer and five men wounded. This affair was speedily followed by the murder of a settler named Rush. Numbers of out-settlers fled to Wellington in terror, while those who had the hardihood to remain on their lands took up arms and entrenched themselves in stockades. Rangihaeata's success was winning over neutral natives, and a feeling of despair began to pervade the European settlements. At this crisis Governor Grey struck a blow which for a time quite paralyzed the native mind, and which many persons both then and since held to be quite unwarranted. Rauparaha, though nominally an ally, was strongly suspected of playing the Government false, and of secretly aiding the outlaws. It was therefore decided to seize him in his *pah*. The Governor, without informing the celebrated warrior chief that his friendship was doubted, sent away *H.M.S. Driver*, with one hundred and thirty soldiers, seamen and police on board, to surprise him in his stronghold. They landed at Porirua before daylight, on the 23rd of July, 1846, surrounded the *pah*, captured Rauparaha asleep in his bed, and carried him away to the war-vessel in the offing, whence he was conveyed to Wellington. This event created a tremendous sensation throughout the colony, and among the native laments which were freely

composed at the time, was one of great beauty by Rangihaeata himself. Likening the captive to a gallant war-canoe dashed to pieces in the surf, he thus apostrophized him:

My brave canoe!
In lordly decoration lordliest far;
My proud canoe!
Amid the fleet that fleetest flew,
How wert thou shattered by the surge of war?
'Tis but the fragments of the wreck
Of my renowned canoe
That lie, all crushed, on yonder war-ship's deck.

In subsequent verses, equally poetic, Ruaparaha's tribes-men are taunted with desertion of their chief; he is blamed for trusting in the honour of the *pakehas* (foreigners); and the lament ends with a declaration of Rangihaeata's resolve to rescue him. But Rangihaeata had reckoned this time without his host. The Authorities, fully aware that inaction would hasten some fearful deed of revenge, lost no time in carrying the war into the enemy's country. While preparations were made to assault the rebel stronghold at Pahautanui, four miles from the British camp at Porirua, a party of friendly natives was detailed to cut off the retreat. In alarm at these measures, Rangihaeata suddenly forsook Pahautanui; and, on the 29th of July, the expedition under Major Last of the Ninety-ninth entered into occupation of it. It was found that the enemy had withdrawn to a strong position in a densely-wooded gorge, six miles up the Horokiwi, and thither they were followed by the entire force of two hundred and fifty men. The attempt to dislodge the rebels failed; and, as it was not deemed prudent to storm the *pah* while the fire of small-arms and mortars appeared to be harmless, the expeditionary force fell back, with the loss of three killed and eight wounded. Ensign Blackburn, of the Ninety-ninth, was among the slain. The enemy sustained no loss. Lieutenant Servantes, of the Ninety-sixth, was left in front of the *pah* with the friendly natives, and at last the enemy, unable to procure supplies of food, and driven to subsist on tree-fern, dispersed into the interior, whither the troops, police and friendly natives pursued them until a number of rebels were arrested. They were tried by court-martial. One was adjudged insane and exempted from punishment, seven were sentenced to transportation, and a Wanganui chief, related to Rangihaeata, and named Wareitu (baptized Martin Luther), was condemned to pay the last penalty of the law. He met his fate at the gallows with a fortitude that excited great admiration; and, as his offence consisted merely in joining Rangihaeata for the vindication of a cause which he deemed just and patriotic, the military tribunal which delivered him over to death incurred considerable obloquy thereby. The sense of injustice which it caused was confirmed rather than alleviated when the Secretary of State, announcing that doubts existed as to the legality of the tribunal, pardoned the seven prisoners who had been transported to Tasmania. Ruaparaha, after ten months' detention on board *H.M.S. Calliope*, was allowed to occupy Te Wherowhero's house in the Auckland Domain. In September, 1847, he was visited there by two hundred Hauraki chiefs. The old warrior, however, pined for freedom, and at last the Government, yielding to a request, had him conveyed to his home at Otaki in January, 1848, by *H.M.S. Inflexible*. He died there on the 27th of November, 1849, and a *cortege* of fifteen hundred persons followed his body to the grave, where a lay European read the Burial Service over it. Rangihaeata, the nephew of Ruaparaha,

retired to Pouratawao after the dispersal of his adherents, where he lived quietly until his death in 1855, at the age of seventy years.

THE OUTBREAK AT WANGANUI.

The peace which ensued upon the Horokiwi expedition was short and illusory. Most of the disaffected natives had gone to Wanganui; and, reasoning from the more lenient treatment of Heke and his followers in the North that desperate and bloody conflicts commanded generous terms of peace, they quietly prepared to resume the field. Towards the end of 1846 some settlers were threatened and plundered, and in December a detachment of soldiers was sent into the district. Nothing of moment, however, occurred till the 16th of April, 1847, when a midshipman of *H.M.S. Calliope* accidentally shot a native chief through the cheek. The Maoris maintained that the wounded man's life had been deliberately attempted, and the *lex talionis* was invoked. Two days later, half-a-dozen natives attacked the house of a settler named Gilfillan, six miles from Wanganui, and murdered his wife and four children. Next day, five of the murderers were arrested by friendly natives and handed over to Captain Laye, of the Fifty-eighth. They were tried by court-martial, found guilty, and four of them were executed, the fifth being pardoned on account of his youth. War broke out at once. A soldier of the Fifty-eighth Regiment, wandering too far afield, was murdered, and at noon on the 19th of May the hostile natives appeared before the settlement, six hundred strong. The British force consisted of one hundred and seventy men, and was quartered in three wooden stockades, from which, with a gun-boat in the River, a close fire of shot and shell was kept up for five hours. The natives, under the chief Mamaku, replied to the fire from the shelter of the deserted houses in the township, and advancing several times to within pistol-range of the troops, they defiantly challenged them to open combat. But the soldiers had grown wary, and remained within cover. During the night the natives pillaged the town, stole and killed cattle, and then retired with a loss of two chiefs killed and ten wounded. Their opponents sustained no loss. The enemy took up a position three miles off, and for a fee of five pounds a settler was found to take a letter with the news of the rising to Wellington.

Her Majesty's ships, *Calliope* and *Inflexible*, immediately sailed for Wanganui with Governor Grey, Lieutenant-Colonel McCleverty, and detachments of the Fifty-eighth and Sixty-fifth Regiments and of the Royal Artillery, as well as the friendly chiefs Te Whero-where, Tamati Waka Nene and Te Puni. The available British force now numbered five hundred men. On the 4th of June, the enemy appeared before Wanganui, and made a vain attempt to draw the troops into an ambushade. A reconnoitring party of the Sixty-fifth was attacked on the 10th, and the enemy lost several killed and wounded. They then withdrew higher up the River, but on the 5th, the 10th and the 17th of July they returned, and with the utmost daring advanced in small parties close to the stockades. On the 19th, a small party of marauding natives attacked the military outside their stockades, and an action was the result, in which the losses on either side were precisely the same: namely, three killed and ten wounded. Next morning the natives sent a challenge to the troops to go out and fight on the open plain with them, and as it was not accepted they proceeded to break up their encampment, and

left, saying, "We cannot remain any longer, but must go and plant our potatoes."

So terminated this war, the natives explaining that as an equal number had been killed on either side they were perfectly satisfied. They would not humiliate themselves, however, by asking for peace, and the blockade up and down the River was therefore continued. Cut off in this way from procuring such civilized comforts as pipes, tobacco, blankets, tea and sugar, they found these deprivations too great a hardship, and at the end of the year they wrote to the Governor intimating their desire for peace. On the 21st of February, 1848, the leading chiefs met the Governor and Major-General Pitt, the Officer Commanding the Troops in New Zealand, whereupon peace was proclaimed



WANGANUI, TO-DAY.

and a general amnesty granted. In this campaign the stigma that attached to the insurgents was the murder of the Gilfillans, and that would appear to have been the unauthorized act of six youths, of whom the eldest was not eighteen, who were actuated by a *vendetta* spirit, the chief wounded by the midshipman being their relative. The boy of twelve, who was pardoned, actually entreated to be hanged along with his companions. On the other hand, a colonist who was made prisoner during the trouble was sent back to his friends uninjured; and, upon peace being restored, raided cattle were returned, while the natives were paid a fair price for lands of which the ownership was in dispute, which had formed one of the incitements to the taking up of arms.

MINOR ALARMS AND OUTRAGES.

After the expenditure of nearly a million of money, and with a record of eighty-five soldiers, seamen and militia-men slain, besides one hundred and sixty-seven wounded,

from the sacking of Kororareka to the peace at Wanganui, the colony obtained comparative repose. That is to say, the normal incidents of life in a new country inhabited by two diverse races marked the time. Murders and alarms were but sporadic, and were easily dealt with under the ordinary processes of the civil law. "Grim-visaged war had smooth'd his wrinkled front," and for nearly thirteen years the country progressed and prospered. Honours and rewards were distributed among the leading military officers and friendly chiefs, Governor Grey was knighted—the chiefs Tamati Waka Nene and Te Puni acting as his squires at the ceremony—pensioner settlements were formed in the neighbourhood of Auckland, and the discharged soldiers who took up land in them were formed into a corps called the "New Zealand Fencibles," so as to be ready to serve their adopted country should the emergency ever again arise. A portion of the troops finally left for England. The germs of future troubles had hardly begun to sprout, and the time for garnering that deadly crop was yet far distant. Both trouble and danger were incurred in the effort to bring the Maoris under the operation of the ordinary British law, and to subordinate many of their traditional usages to European methods of dispensing justice. Early in 1849, a native named Maroro was sentenced to a term of four months' imprisonment in Wellington Gaol for robbery. This punishment carried with it to the aboriginal mind indelible disgrace, and the prisoner meditated a terrible revenge. Three days after his liberation he procured an axe, and repairing at night-fall to the house of a settler named Pranks, near the Porirua Church, he murdered the head of the household and two of his children, aged nine and two years respectively. From the scene of the crime he returned to Wellington, and on being arrested at once confessed his guilt. At his trial he explained that the bloody deed was committed solely as *utu*, or retaliation, for his imprisonment, and upon being led out for execution he met his fate with perfect indifference. In some instances the Maoris took the law into their own hands, and tried and executed, in rude imitation of the procedure of European tribunals, natives who had committed capital offences in their own settlements.

In 1851, an accidental circumstance in the streets of Auckland led nearly to an open rupture between the two races. A Maori was arrested for petty larceny, and in the course of a scuffle over the affair an inoffensive chief was knocked down by a Maori policeman and carried off to the guard-house, whence he was released an hour later. Furious at this unwarrantable insult, the chief hurried to his tribe and passionately told how he had been struck to the earth and disgraced by a mere slave. Three hundred armed natives in thirty-five war-canoes accompanied the insulted chief back to Auckland, and landing in Mechanics' Bay, almost within a stone's-throw of Government House, demanded that the offending native policeman should be given up to them. The Authorities felt that to exhibit a spirit of irresolution in face of such a menace would but serve to bring the law into contempt and invite disaster. A stern and determined attitude was accordingly shown. The natives were told that if they did not leave the town within two hours the guns of *H.M.S. Fly* and of Fort Britomart would open fire upon them, and in the meantime the "Fencibles" marched in from Onehunga. Overawed by the determination thus manifested, the Maoris wisely recognized that discretion was the better part of valour, and therefore withdrew, and two days afterwards, in order to prove that their intentions were peaceable, a number of the

chiefs laid at Governor Grey's feet *meres* and spears as symbols of their submission.

Three years later, some discontent, which for a time threatened to culminate in a rising, was caused by the alleged inadequate punishment of a man named Huntly, who struck a Maori woman dead in the town of Auckland. The jury brought in a verdict of manslaughter, but the natives clamoured for the execution of the criminal, on the old principle of blood for blood. However, the Authorities were inflexible, and the Maori feeling gradually subsided. Next year a more turbulent demonstration, caused by a somewhat similar crime, was only allayed by the criminal paying the extreme penalty. In a fit of



MOUNT RUAPEHU.

delirium tremens, a settler named Marsden murdered a native woman, and the prisoner was convicted on trial and duly sentenced to death. Unusual delay in carry-

ing out the sentence gave rise to a report that the life of a Maori was not regarded as of equal value with that of a European; and the native mind becoming inflamed by another murder of a Maori at the hands of a drunken settler, three hundred men belonging to the tribe of the murdered woman came to Auckland, and threatened to cut down the flag-staff which carried the British ensign. In February, 1856, Marsden was hanged, and the natives were satisfied.

Meanwhile, native land troubles, originating in official disregard of immemorial custom among the Maoris, and destined to end in bloodshed and devastation, had begun to attract attention at Taranaki, on the west coast of the North Island.



ROTO AIRA.

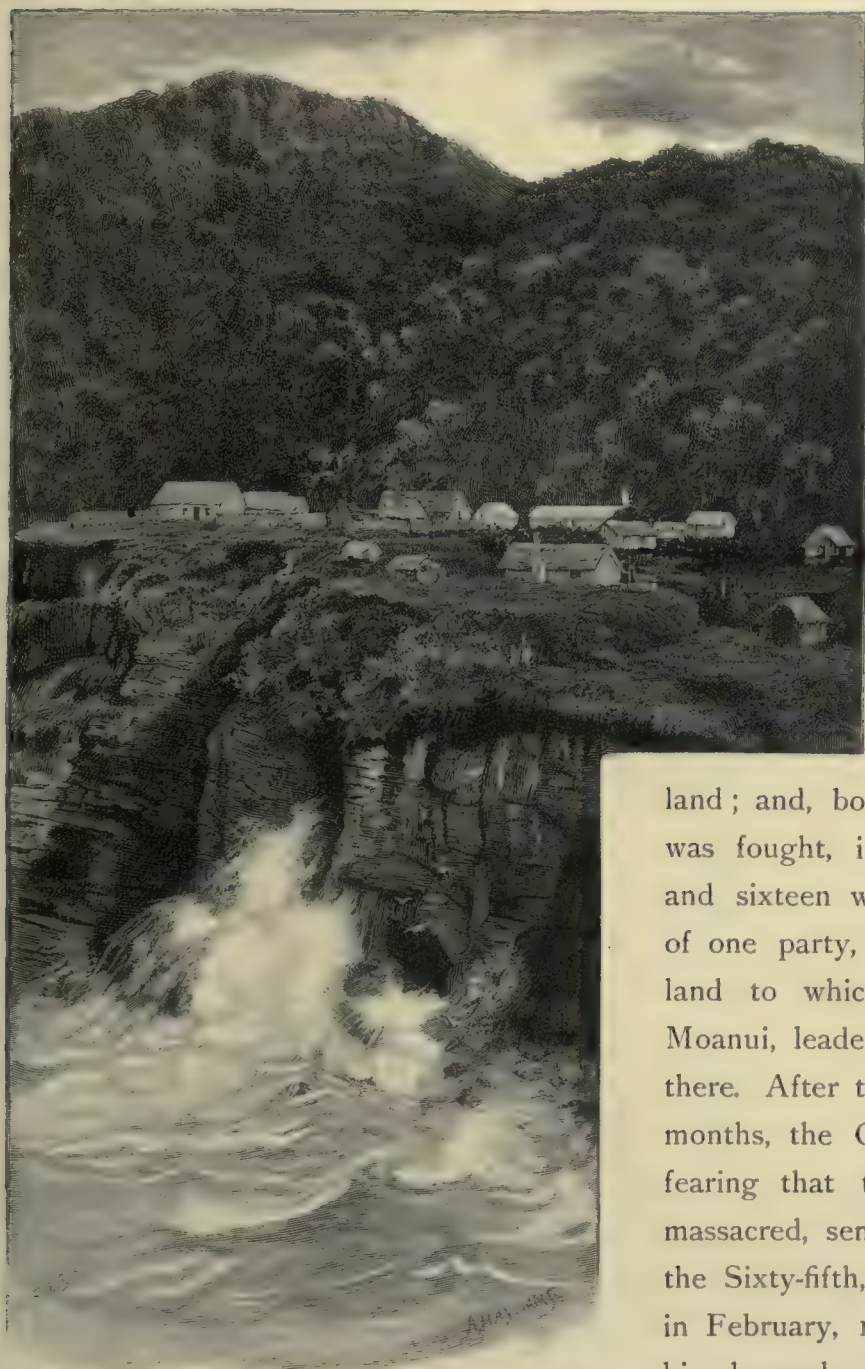
As early as 1843, disputes between the settlers of New Plymouth and the Maoris, as to the ownership of certain lands, led to a decision by Governor Fitzroy that territory acquired by a tribe through conquest did not altogether pass away from the conquered, but that they still had some rights in it. As a consequence, the original fugitives from Taranaki, dispersed in prehistoric times by Te Wherowhero's incursion, began to migrate back again. Among others came Wiremu Kingi te Rangitake (William King), chief of Ngatiawa, with six hundred people from Otaki, and settled down on their ancestral lands on the southern bank of the Waitara River, ten miles from New Plymouth. These returned emigrants were characterized by a strong disinclination to part with their patrimony to the Europeans, who were correspondingly eager to buy. The native community of ownership formed another and very prominent ingredient of the difficulties which arose.

The Taranaki tribes formed an Anti-land-selling League; and, in order to invest the compact with due solemnity, buried a Bible in the earth, and raised a cairn of stones over the spot. In 1854, a chief named Rawiri Waiaua, who held aloof from the League, probably for the very practical reason that he drew a salary from the Government as an assessor, offered to sell a portion of the Hua block which belonged to him. As he was interested, in common with the principal Leaguers, in the remainder of the block, the Government Commissioner urged him to sell out his entire rights, remarking that the portion he offered was too small to be worth buying. Rawiri pointed out that in the bulk of the block he had only a joint interest, and that his co-owners were strongly averse to a sale. The Commissioner, however, was insistent, and Rawiri, yielding at last against his better judgment, announced his decision to sell. Waitere Katatore and the other owners warned him that if he attempted to bring the surveyor's chain on the land he would have to come armed, as they were resolved to resist him. Rawiri assembled his forces and took the chain to the land. Katatore, who was present in command of sixty armed followers, requested him to desist, and, as Rawiri declined, ordered his men to fire a volley. The order was obeyed, and Rawiri and seven of his men were slain, while ten others were wounded. Both settlers and friendly natives appealed to the Government, but the Authorities were slow to act. Not so the natives. Arama Karaka, Rawiri's successor, was already on the war-path, and a conflict between his forces and those of Katatore resulted in twelve men being slain and sixteen wounded. The disturbance spread far and wide, and a panic having seized the settlers, the Government, in August, 1855, sent four hundred and fifty soldiers of the Fifty-eighth and Sixty-fifth Regiments, under Major Nugent, to New Plymouth. Governor Grey had left for England at the end of 1853, and Colonel Wynyard, the officer administering the Government, followed the troops to New Plymouth, accompanied by Tamati Waka Nene, Te Wherowhero and Te Puni. After investigating the circumstances of the affair, he declined to avenge the murder of Rawiri, holding that that chief was killed for offering to sell land which did not belong to him. Two hundred and fifty soldiers of the Sixty-fifth were left at New Plymouth to protect the settlers. The inter-tribal strife was resumed without interference from the Government, and, at last, Katatore and his half-brother were foully murdered by a chief named Ihaia (Isaac), who was also allowed to escape free. This

guerrilla warfare lasted for two years, and, after sixty Maoris had been slain and one hundred wounded, a truce was made between the parties in December, 1856.

The Government saw that it had erred in not interposing, and the head chiefs of the North Island were invited to a conference on native affairs with the Governor, at Kohimarama, in the outskirts of Auckland. About fifty attended, but as the inaugural address was in large part a special argument in support of the sale of land, the

chiefs regarded the whole proceeding as a crafty attempt to hoodwink them, and little good was effected by the meeting. The League was upheld, and a few years later the land question was fated to be the cause of a bloody war. In August, 1857, agrarian troubles broke out in the province of Hawke's Bay, on the east coast of the North Island. Two divisions of the Ngatikahungunu tribe quarrelled over the distribution of money received from the Government for the sale of



THE CONSTABULARY STATION, PUKEARUHE.

land; and, both sides taking up arms, a battle was fought, in which eight men were killed and sixteen wounded. Te Hapuku the leader of one party, entrenched himself in a *pah* on land to which his title was doubtful, and Moanui, leader of the rival party, besieged him there. After the siege had continued for several months, the Governor, Colonel Gore Browne, fearing that the beleaguered forces would be massacred, sent two hundred and fifty men of the Sixty-fifth, under Colonel Wyatt, to Napier, in February, 1858. Moanui at once moderated his demands, and through the good offices of Mr. (afterwards Sir) Donald McLean, a fort-

night's armistice was arranged, which resulted in Te Hapuku being allowed to march out with the honours of war. Subsequently, peace was proclaimed, and the belligerents exchanged presents in token of amity.

"THE KING MOVEMENT."

While these warlike distractions were keeping portions of the North Island in a state of unrest, a great movement, fraught with the utmost importance, was silently

working and winning its way among the Maoris. The spirit of nationality and federal unity was asserting itself. It was conceived in the purest intentions, and was shaped by the loftiest motives. The chiefs saw that, concurrently with the decline of their *mana* or authority, their people were imbibing the worst vices of the Europeans. Drunkenness and its concomitant evils were becoming alarmingly prevalent, tribal dissensions were frequent, the land was rapidly slipping from their relaxed grasp, and though in the eye of the law they were said to be equal with their European fellow-subjects of the Queen, they were, in reality, looked down upon as an inferior and subjugated race, and treated by many of the settlers with contumely. The flowing tide of immigration threatened to engulf them, the privilege of the franchise was, to all intents and purposes, withheld from them, and their petitions for the interdiction of the liquor traffic in purely Maori districts produced no tangible result. True, an Ordinance was at last passed making the sale of strong drink to natives a misdemeanour, but it was so openly and flagrantly evaded that, from the very outset, it proved inoperative. The neutrality observed by the Government during the internecine warfare on the west coast, brought about by the unwise action of one of its own officers, was not by any means a solitary evidence that, in the face of contrary professions, there was one law for the *Pakeha* and another for the Maori. The natives were apt and shrewd enough to mark these things, and to make logical deductions from them. Their best men pondered the matter, and gradually came to a conclusion to set up some form of Government of their own that should exist side by side with the authority of the Queen, bind the two races together in brotherly love, and allow them to advance *pari passu*.

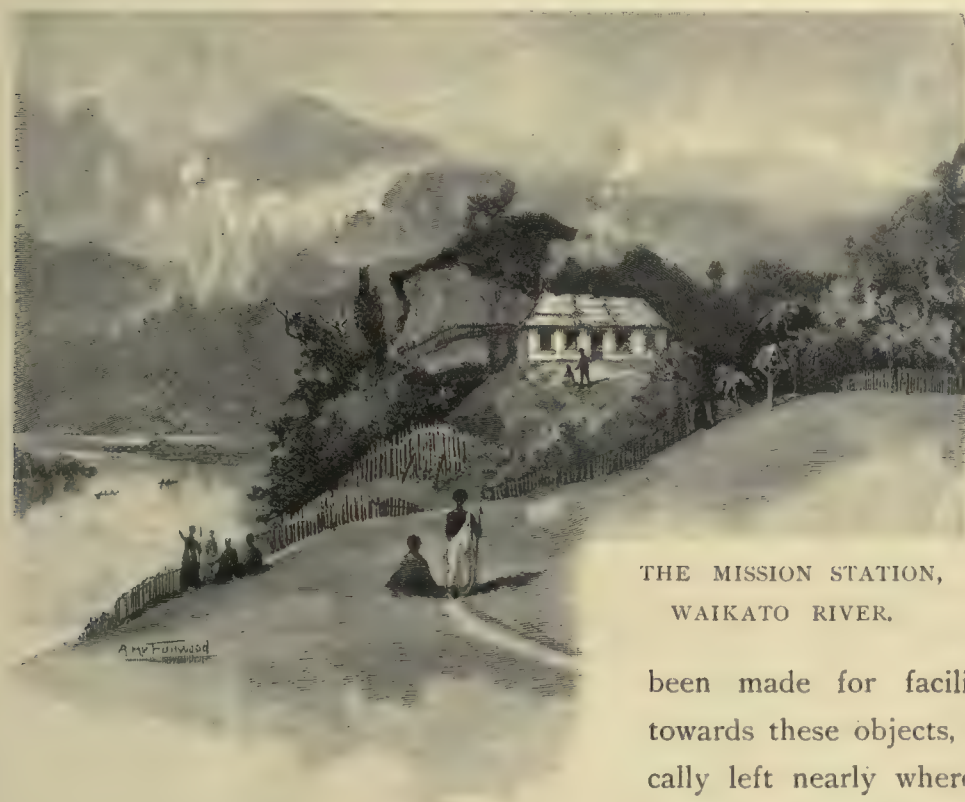
As long back as 1853 the movement was beginning to take form. In that year a chief named Matene Te Whiwhi fused its hitherto inchoate elements; and, setting out from Otaki with several other leading chiefs, he visited Taupo and Rotorua to obtain the consent of the more powerful tribes to the appointment of a king, and the constitution of some kind of recognized Government in the central parts of the North Island, where the white man had not yet penetrated. Jealousy of his own assumed pretensions to the kingly dignity defeated the success of the Otaki chief's project. Te Heu Heu, the great Taupo chief, whose authority had never been brought into collision with that of the distant European, and who was determined to brook no rival in his own domain, declined to associate himself with the movement. At Maketu and Rotorua it failed to evoke enthusiasm. The time was hardly ripe for it, and the *runanga*, or conference, of chiefs, met to consider the proposal, issued the following letter to the tribes:—"Listen all men: The house of New Zealand is one; the rafters on one side are the *Pakeha*; those on the other, the Maori; the ridge-pole on which both rest is God. Let therefore the house be one. This is all!" Still, the necessity of some mode of Government in the districts inhabited almost exclusively by themselves, if they were not to be abandoned to complete anarchy, pressed itself more and more upon the minds of the leading Maoris. Even the European settlers could not deny the force of the contention.

So entirely was the extensive and populous Waikato District neglected, that the Rev. Mr. Ashwell, a missionary stationed at Taupiri, stated before a Committee of the New Zealand House of Representatives, that during nineteen years prior to the "king movement" he could not remember more than three or four visits to the Waikato by

officials. Other districts had not received even that scant measure of attention. In a memorandum, dated the 25th of May, 1861, Governor Gore Browne placed on record the statement that "some of the most populous districts, such as Hokianga and Kaipara, have no magistrates resident amongst them; and many, such as Taupo, the Ngatiruanui, Taraniki, and the country about the East Cape, have never been visited by an officer of the Government. The residents in these districts have never felt that they are the subjects of the Queen of England, and have little reason to think that the Government of the colony cares at all about their welfare." Sir George Grey bears similar testimony.

Writing to the Secretary of State on the 6th of December, 1861, he says:—"Ten years since, the urgent necessity of introducing simple municipal institutions among them (the Maoris) was pointed out, and the first step taken to induce them to refer their disputes to our Courts. But, though various proposals have

been made for facilitating a further advance towards these objects, the matter has been practically left nearly where it then was." In other words, the obligations undertaken in the Treaty of Waitangi had been quietly ignored.



THE MISSION STATION,
WAIKATO RIVER.

The Measure, spoken of by Sir George Grey as the first step taken to induce the Maoris to refer their disputes to European Courts, was an Ordinance for appointing resident magistrates to exercise jurisdiction in civil cases between Europeans and Maoris, where the amount sued for did not exceed twenty pounds. But, then, no means were provided for enforcing the magisterial decisions in cases where the Maori was the losing party. For dealing with cases between the Maoris themselves, a number of chiefs were appointed assessors, each party to the suit being at liberty to select one assessor to sit in judgment conjointly with the magistrate. But unless the assessors concurred in their opinion after the hearing, nothing could be done. Such a Measure was stamped from the outset with the impress of failure. It says much for the Maoris' desire for some kind of tribunal to settle their disputes, and it attests their inherent love even of the semblance of justice, that the Measure did work after a fashion, though some of the native methods of carrying out judicial functions were very ludicrous to the civilized mind. Mr. (now Sir) J. E. Gorst relates several cases in point. For instance, Ti Oriori, of Maungatautari, whose legal acumen would do credit to Lincoln's Inn, was accustomed to assign an hour to the hearing of each case; when time was up he

promptly cut short the pleadings or the evidence, and gave his decision. In one case, where his judgment was palpably wrong, the losing party expostulated after the sitting of the Court, and explained the rest of his cause. Ti Oriori said he was very sorry for him, but he never allowed a case to be re-heard. This chief apparently was not troubled with what the French call *la mauvaise honte*, for he was quite willing to act as his own bailiff, and made himself very useful to Europeans by enforcing their claims against natives in his own Court, recompensing himself for his trouble by charging a commission on the amount recovered.

Heteraka Nera, who held a court at Raglan, appears to have acted in much the same way. Apart from this short-lived and rather comical juridical system, the Government hardly made even a pretence of governing the natives. The Colonial Authorities shrank from the cost of the undertaking—all the revenues were required for the settlers' purposes; and, on the other hand, the Imperial Government, thinking the cost of the military establishment a sufficient contribution to the expense of managing the country, urged that it had no funds to spare. Therefore the policy pursued was one of abstention from purely native affairs. At the same time, by liberal distribution of blankets, sugar, flour, and other European commodities, as well as by pensions, it endeavoured to win over and attach the affections of the leading chiefs. This has passed into history as "The Flour and Sugar Policy," and it is still disputed whether it worked more harm or good. After a time it became matter of common reproach that turbulent and notoriously hostile chiefs received more indulgences than those whose friendliness had never been doubted.

All these things were conspiring to give form to the aspiration after unity and self-government. Tribal wars had become so common that a thoughtful chief described them as "a river of blood" flowing through the land. Drunkenness was increasing, despite the strenuous efforts of the chiefs to check it. Wiremu Tamihana Tarapipipi (William Thompson), head chief of the Ngatihaua, saved his tribe from demoralization only by causing every European settled in his territory to sign a bond to pay one pound for every Maori found drunk on his premises.

Notwithstanding Matene te Whiwhi's failure to secure the definite acceptance of his proposals in 1853, the movement rapidly progressed, and in May, 1854, another grand *runanga* was convened to discuss it at Manawapou, in the country of the Ngatiruanui. A council-hall was erected, one hundred and twenty feet long and thirty feet wide, with two entrances, and it was called "Taiporohenui," or the finishing of the matter. There a league for the preservation of native lands, similar to that at Taranaki, was formed, and a tomahawk was passed round to signify that all would agree to put to death the individual who should depart from its purpose. In 1856, Te Heu Heu summoned another *runanga*, the French flag was hoisted, and several schemes for the maintenance of Maori autonomy were discussed without any conclusive decision being arrived at, although it was distinctly proposed thereat that Potatau te Wherowhero, the great chief of the Waikato tribe, should be king. At the beginning of 1857, an incident happened that quickly led up to a settlement of the course to be pursued. Wiremu Tamihana Tarapipipi, to whom reference has just been made, visited Auckland in order to see the Governor, represent to him the lawless state of the country, urge the necessity of some remedy, and obtain a promise that a European magistrate should be stationed at his

own village. He was coldly received, and rudely refused access to the Governor's presence by some subordinate official, while his application for a loan to erect a flour-mill was not entertained by the Native Secretary. Hitherto he had not identified himself with the "king movement," though he was known to be favourable to it, but on his return to the Waikato he issued the following circular:—"February 12th, 1857. To all Waikato. This is the agreement of Ngatihaua for Potatau to be king of New Zealand. Friends—Our desire is great that Potatau should be set up in this very year. Do not delay. Hasten the assembling of the *runangas*. Hasten the establishment of the scheme, and when it is done the documents will be collected, and the day will be fixed for instituting him. Be speedy. You will write to the remote tribes that they may hear. From Wiremu (Tamihana) Tarapipipi and all Ngatihaua to Waikato, to Kereihi, Pukewau, Harapata, Toma, Ruihana, Waata Tengtete. Be speedy."

The choice of Te Wherowhero as sovereign was politic. He did not aspire to be proclaimed king, but offered to act as arbitrator in land disputes. Tamihana was resolved to overcome the old chief's scruples, and the Waikato tribes were therefore summoned to meet at Rangiriri in April, 1857, to install their King. Recognizing the political importance of this gathering, Governor Brown made up his mind to attend it, and accordingly set out for the Waikato, accompanied by Mr. McLean, the Native Secretary, and Mr. Richmond, a Member of the Cabinet. He arrived



TE WHEROWHERO.

at Rangiriri simultaneously with Te Wherowhero. In the latter's presence the leading chiefs made speeches to the Governor. They asked for *runangas*, a European magistrate, and laws. In reply the Governor promised to send a magistrate to reside in the Waikato for the purpose of periodically visiting the various settlements, and, with the assistance of the native assessors, of administering justice. He also promised to cause a code of laws, applicable to native requirements, to be framed. The people waved their hats and cried "Hurrah." Te Wherowhero announced that he would be guided by the advice of the Governor. His Excellency returned to Auckland convinced that he had settled the "king movement," and Mr. F. D. Fenton, a well-known solicitor, was appointed Resident Magistrate of Waikato and Waipa, in fulfillment of his promise. But the mind of the Governor and that of the chiefs had been travelling on different lines. He regarded his offers in the light of a substitute for the "king project." They, on the other hand, accepted them evidently as a complement to it, for they saw nothing incompatible between the proclamation of their own nationality under a Maori king, and the continuance of the Queen's supremacy over the colony. Many of the Europeans holding responsible positions in the colony were of a like opinion; while others regarded the "king movement" as absolutely inconsistent with the Queen's sovereignty.

After the Governor's return to Auckland, the meeting at Rangiriri proceeded. The

guests arrived in fifty canoes, and the conference was inaugurated by the men of the Ngatihaua tribe, forming four deep, and planting in the centre of a large open space, the chosen Maori emblem of sovereignty—a white flag, bordered with red, bearing as device two red crosses, symbolical of Christianity, and also the inscription, "Potatau, King of New Zealand." About two hundred natives were present. The Union Jack was hoisted side by side with the new flag, and the speakers emphasized the assurance that the movement was in no sense a demonstration of hostility towards the Queen. One chief, Rangiwahia, declared that if aught were done unfriendly to the Queen he would himself hew down the King's flag. After several days' talk the entire party adjourned to Ihumata, a native village on the Manukau, about eight miles from Auckland, where another meeting was held, at which Bishop Selwyn and other clergymen were present. It ended in the acceptance of Potatau as King, and at the end of the year the new potentate, abandoning his settlement of Mangare, just across the Manukau River from Onehunga, went to live in the Waikato, among his most zealous subjects. In July, 1854, Mr. Fenton entered upon his magisterial duties, but the absence of power to enforce his authority, together with the dual, sometimes conflicting, control of native affairs exercised by the Governor through his native office and the Colonial Ministry, defeated his usefulness, and, after making two circuits, he was relieved of his duties. The attempt to govern the Maoris was then relinquished, and the field left clear for the Maori King. It was thought by the Governor that the surest way to discredit the movement would be to treat it with absolute contempt and indifference, but Mr. Fenton's withdrawal from the Waikato disheartened the friendly natives, and threw most of them into the arms of the King. In April, 1858, at Ngaruawahia, the native capital, Te Wherowhero was formally proclaimed King in the presence of about two thousand people, and saluted as Potatau the First. Singularly enough, his pension continued to be paid up till the 31st of March, 1860, or within a few months of his death, which took place on the 25th of June, 1860. Even then the Government contributed towards his funeral expenses. In May, 1860, a great meeting was held at Ngaruawahia for the complete establishment of the monarchy, a system of native police, and the nucleus of a standing military force were formed, a parliament, or *runanga*, of chiefs was called, village *runangas* for the administration of justice were instituted, and funds collected for the foundation of a Maori newspaper. After the death of Potatau the First, his son, Matutaera, was proclaimed King by Tamihana, under the title of Potatau the Second. In later times he changed his name to Tawhiao, by which he is now generally known. For the next twenty years the "king movement" was destined to form a leading factor in native affairs.

THE FIRST TARANAKI WAR.

While the agitation for Maori self-government engrossed the attention in the central districts of the North Island, serious trouble was brewing on the West Coast. The settlers were annoyed at the steady refusal of the aboriginal owners of the soil to sell any more land, the influence of the Anti-land-selling League, presided over by Wiremu Kingi, being actively exercised to discourage all sales. In 1858, the Taranaki settlers fruitlessly memorialized the General Assembly to set aside the tribal right to land, and

permit such natives as were willing to dispose of their individual rights in common land to do so. Early in 1859, Wiremu Kingi notified the Governor that no more land was to be sold in the district extending from New Plymouth to Mokau, and asking him, therefore, to pay no heed to any offer of land within those limits. Immediately afterwards the Governor visited New Plymouth, and at a meeting with the natives he stated that he never would consent to buy land without an undisputed title, but that he would not permit any one to interfere in the sale of the land who did not own part of it. The natives misapprehended his meaning, and understood that his intention was to start a new policy by treating with individual claimants, disregarding the *mana* of the chiefs, and setting aside the tribal right. Accordingly, a native named Teira (Taylor) got up and offered the Governor his land at Waitara for sale, and on the offer being pressed, Mr. McLean, the Native Secretary, on behalf of the Governor, replied that he would buy provided a good title could be made out. Wiremu Kingi, head chief of the Waitara, or Ngatiawa tribe, and representing some sixty claimants to the land, then rose and said: "Listen, Governor! Notwithstanding Teira's offer, I will not permit the sale of Waitara to the *Pakeha*. Waitara is in my hands. I will not give it up—Never, never, never! I have spoken." Whereupon he and his followers abruptly withdrew. After nearly a year spent in investigating Teira's title, Mr. Parris, the District Land Purchaser, reported that the same was good, and the sale was completed in due course.



THE NIKAU PALM.

On the 20th of February, 1860, surveyors were sent to mark the boundaries, and by way of protest the natives directed some of their women to pull up the pegs and

cut the chain. No violence was offered. Ten days later martial law was proclaimed, and a body of troops under Lieutenant-Colonel Murray marched to the Waitara block, ten miles from New Plymouth, for the protection of the surveyors. During the night Kingi's party built a *pah* commanding the road, and stopped an escort. The Governor replied with the following manifesto:—"To the chief who obstructs the Queen's road. You have presumed to block up the Queen's road, to build on the Queen's land, and to stop the free passage of persons going or coming. This is levying war against the Queen. Destroy the places you have built; ask my forgiveness, and you shall receive it. If you refuse, the blood of your people be on your own head. I shall fire upon you in twenty minutes from this time if you have not obeyed my order.—T. GORE BROWNE." The natives evacuated the *pah*, and the troops destroyed it. A few days



WAITARA.

afterwards a party of some seventy natives returned and built a stockade on the land. *H.M.S. Niger* had just arrived with a re-inforcement of the Sixty-fifth Regiment, and on the 17th of March, Colonel Gold marched out with a detachment of artillery and three guns, two hundred and ten men of the Sixty-fifth, a party from the *Niger* with a rocket-tube, twenty mounted volunteers and a company of the Royal Engineers. The natives were summoned to surrender, but refused, and the troops opened fire with shot and shell.

On the night of the 17th, the stockade was found to be abandoned, but the Maoris were entrenching themselves in stronger positions, and the restriction on the sale of arms having been foolishly removed in 1857, they were well supplied with munitions of war. The settlers abandoned their homesteads and sought refuge in the township of New Plymouth, whither the troops followed them, and the natives, on their part, ravaged the whole country-side. Kingi had hitherto held aloof from the "king movement," but he now gave in his adhesion to it, and about the same time the Ngatiruanui tribe joined in the rising. On the 30th of March, a *pah* on Waireka Hill was assailed by sixty sailors of the *Niger*, eighty-four men of the Sixty-sixth, and one hundred and sixty volunteers. The volunteers were the first to arrive, but were obliged to seek cover after a hot engagement, while the military were in danger of being cut off and

surrounded. Meanwhile, Captain Cracroft and his sixty blue jackets stormed the *pah*, and crying "Make a back," one after another vaulted on each other's backs until they were level with the top of the fence, and thus found entrance to the stronghold. They were unsupported, however, and had to retire, the entire force returning to New Ply-



THE SIEGE OF PUKERANGIORA.

mouth the same night. The British loss was light, while that of the natives was said to be rather heavy. After this engagement the troops burnt the houses, mills and goods of the enemy wherever they found them, and the enemy made such effective reprisals that, excepting New Plymouth, the settlement was practically destroyed. In the township the crowding of troops and settlers produced much sickness, and eventually nearly all the women and children had to be deported to Nelson. Kingi had written to the "Kingites" for assistance, but a meeting held at Ngaruawahia in May, 1860, showed that the Waikatos were not disposed to take up arms. Still, parties of the more turbulent natives quietly went off to Taranaki on their own account, and swelled the ranks of Kingi's forces until he had about one thousand seven hundred men. Troops, too, were ordered from Australia and England, and before the end of the year there were two thousand three hundred of them in the field. This number included volunteers.

After some inconclusive operations, two hundred and forty-five men of the Fortieth Regiment, under Major Nelson, together with parties of the Royal Artillery, Royal Engineers and Royal Marines, early in June, attacked the Puketakauêre, or "L" *pah*, so called from its shape, situated one thousand four hundred yards from the Waitara Redoubt, and sustained a severe defeat. A breach having been effected with a couple of howitzers, the Grenadier and light companies of the Fortieth rushed forward with the bayonet, but were driven back by a desolating fire. Then a party of natives crept out of the bush and fell upon one of the divisions in the rear of the *pah*, and almost cut it to pieces. The main body was retiring towards the camp when the natives next charged the guns, but were received with a deadly discharge of canister. However, the troops were forced to retreat, leaving their dead and wounded on the field. The British loss was thirty-four killed and thirty wounded out of a total of three hundred and forty-eight rank and file, and the enemy's loss was about six killed and eight wounded. Although his *pah* was subsequently evacuated and burnt, as well as several others which were found empty by the troops, New Plymouth was in the condition of a town invested by the enemy. A dense forest was adjacent to it, and yet fuel had to be procured from Australia. Major-General Pratt now arrived from Melbourne and superseded Colonel Gold in the command of the troops. He brought with him the remainder of the Fortieth. On the 3rd of September, a night march was made to Burton's farm for the purpose of surprising a body of the enemy, but on arrival there the Maoris were found to have decamped. On the 12th of September, the light company of the Fortieth, under Colonel Leslie, came unexpectedly upon a handful of natives in ambush behind a ditch within a peach-grove, and a volley from the Maoris produced such a panic among the troops that they retreated in headlong flight, with a loss of one killed and four wounded. During September and October, *pahs* were destroyed at Oakura and Kaikihi, but the enemy evacuated them in each case in safety. A more decisive engagement took place at Mahoetahi, between Waitara and the Bell Rock. One morning it was found to be occupied by one hundred and fifty natives just arrived from the Waikato, under Wetini Taiporotu, a chief of Ngatihaua. General Pratt sent out a force against it on the 6th of November, and after some firing a company of the Sixty-fifth and the Taranaki Volunteers carried the position at the point of the bayonet. The Maoris lost thirty-four killed and fifty wounded, and the British four killed and sixteen wounded.

The war closed a little later with the siege of Pukerangiora. This was a stronghold on the proper right bank of the Waitara River, protected at the rear by a precipice. Having resolved to reduce it by means of a sap, General Pratt sat down before it in February, 1861, with a considerable force of artillery and infantry; but after some brisk work, and before he had time to complete the capture, Wiremu Tamihana made his appearance from the Waikato on a mission of peace, and through his mediation peace was proclaimed, the dispute which originated the war being left for the law to decide. The terms were that the title to the Waitara should be further investigated, the survey completed, all plunder restored, and that the insurgents should submit to the law. Waitara was eventually surrendered to the natives. It was computed that the Europeans had lost sixty-seven killed and one hundred and forty-three wounded, but many of the latter died of their wounds while over-crowding in New Plymouth, and exposure carried off upwards of a hundred settlers. About one hundred and fifty of the enemy were killed. The war cost the Imperial Government something like five hundred thousand pounds, the colony incurred an expense of two hundred thousand pounds through it, and the direct losses of the settlers were estimated to amount to about one hundred and fifty thousand pounds.



GENERAL CAMERON.

THE WAIKATO WAR.

Governor Browne was succeeded by Sir George Grey, in September, 1861; and Major-General Sir Duncan Cameron, who had been in command of the troops in Scotland, relieved Major-General Pratt. The new Governor promulgated a plan of Government for the Waikato, and as the tribes there had not joined in the friendly demonstration on his arrival, he paid a visit to their district in December, but without producing any good result. During 1862 the relations between the two races were becoming strained, and the feeling of dissatisfaction more general.

The opening of 1863 was signalized by quite a *coup de théâtre* on the Governor's part. Journeying rapidly and unexpectedly from Auckland, he landed at Ngaruawahia unrecognized, and early next morning was found by the astonished natives standing reflectively by the tomb of Potatau, his old friend. He was cordially received, but his announcement that a steamer was coming to trade on the Waikato intensified the feeling of mistrust that had long set in. The still unsettled Waitara dispute was another very potent source of trouble, and the "Kingites" themselves were divided with respect to it. One party, led by Tamihana, and countenanced by the King, was desirous of a peaceful settlement, and therefore did its best to obtain the assent of the tribes to the investigation of the title in the manner proposed by the Government, namely, by

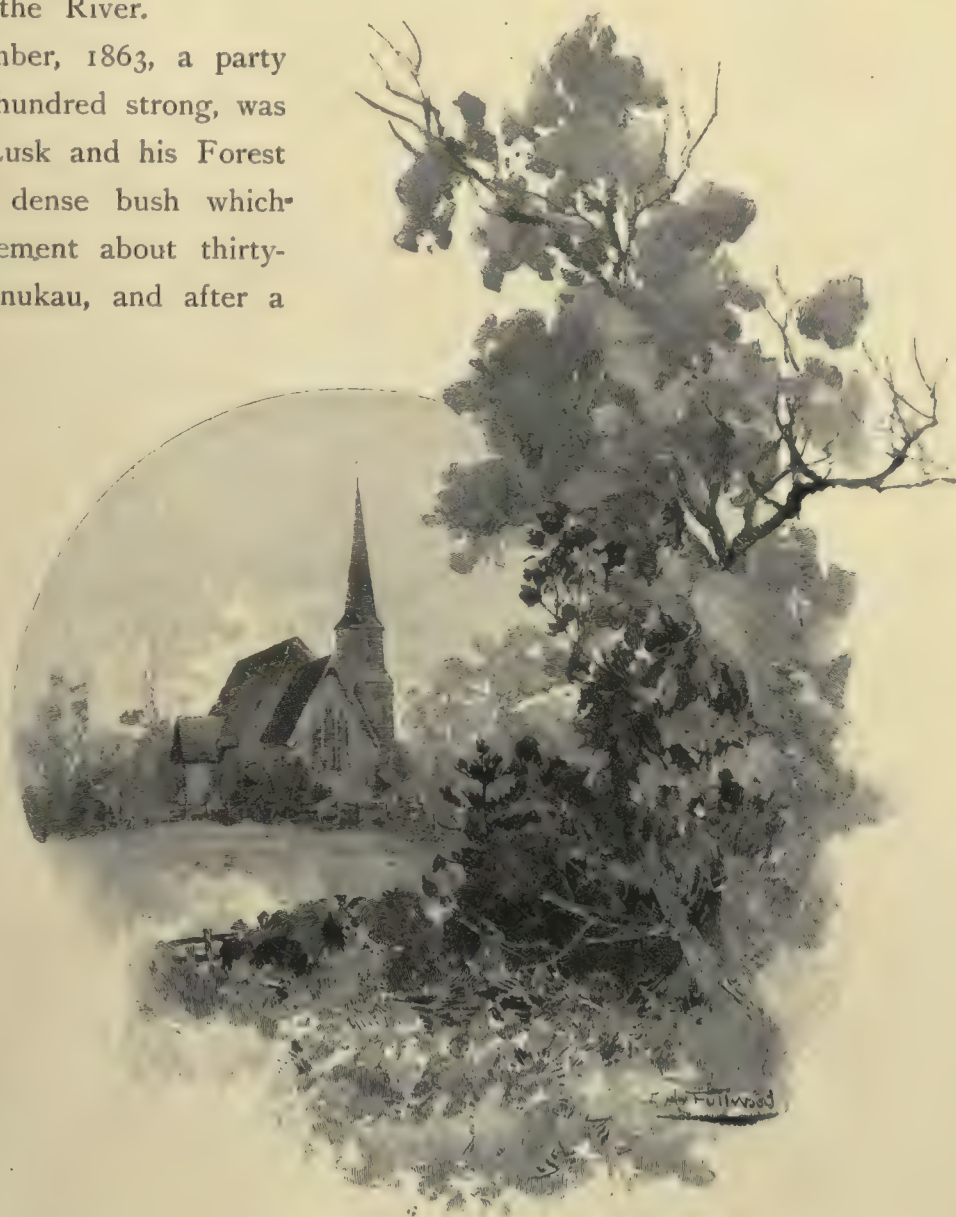
a mixed tribunal of Europeans and Maoris. Wiremu Kingi, however, insisted upon the retrocession of the Waitara block, and Rewi, head chief of the warlike Ngatimaniapoto tribe, with whom Kingi was living, warmly espoused his cause and counselled war. All this time the Ngatiruanui tribe had been in armed occupation of a block of Government land at Tataraimaka, fifteen miles south of New Plymouth, and they were resolved to hold it until Waitara had been returned.

Finding parleying to be of no avail, the Governor resolved upon decisive action, and accordingly, in the beginning of March, 1863, he left for Taranaki with General Cameron and a strong military force, with the intention of retaking Tataraimaka, and of settling the title to Waitara. The Waikatos accepted this step as the prelude to war, and Rewi and his party at once made reprisals. They seized the Police Barracks and a newspaper office, and dismissed the Resident Magistrate. Meanwhile, at Taranaki, the Governor had investigated the title to the Waitara, and finding it defective had determined to give up the block. Unfortunately he proceeded to retake Tataraimaka before proclaiming his decision with respect to Waitara. On Saturday, the 4th of April, the troops took possession of Tataraimaka, and began to build a redoubt. From the turbulent division of the Waikatos the Taranaki natives received the laconic message, "Begin your shooting," and the shooting immediately began. On Monday, the 4th of May, an escort of the Fifty-seventh Regiment, on its way from Tataraimaka, was surprised by a Ngatiruanui ambuscade at Oakura, and Lieutenant Tragett, Dr. Hope and six men were shot down; one man escaped. On the 11th, the Governor issued a proclamation renouncing his claim to Waitara, the troops were withdrawn from it, and the war which had been pending so long commenced.

On Sunday, the 12th of July, General Cameron crossed the Maungatawhiri with three hundred and eighty men of the Twelfth and the Fourteenth Regiments, whom he placed in a redoubt on the Koheroa Heights, overlooking the Waikato River, only five hundred yards distant. On the previous day the Waikatos had set out from Ngaruawahia in two columns. One, composed of the Ngatimaniapoto, and led by Rewi, betook itself to the Huntia Forest, where a harassing guerrilla warfare was kept up with the colonial levies, to the advantage of the Maoris and the loss of the settlers. The other column, composed of the Ngatihaua, and led by Tamihana, adopted European tactics. It advanced straight down the Waikato River with the view of resisting the invasion. On the 17th of July, Rewi's force, having worked its way to the rear of the troops, attacked an escort of the Eighteenth (Royal Irish) Regiment which was marching under Captain Ring from the Queen's Redoubt to Drury, fifteen miles from Auckland. After a smart engagement, the escort, overpowered by numbers, retired to a settler's house with a loss of four killed and ten wounded. On the morning of the same day, the force stationed at Koheroa inflicted a defeat upon a section of Tamihana's party. Observing a body of natives in the ranges in front, Colonel Austin marched out from the redoubt with five hundred men of the Twelfth, the Fourteenth and the Seventieth Regiments. The enemy retired upon several lines of rifle-pits, which were defended so stoutly that the Fourteenth was ordered to advance with the bayonet. The troops were met with a galling fire, and they wavered. The General, who had just arrived, immediately placed himself at their head, and, urging them on, carried the position with a rush. The

British loss was one killed and eleven wounded. Convinced that he had no timorous enemy to cope with, the General determined to make more formidable preparations before advancing further, and a delay of fifteen weeks therefore ensued, during which the Maoris entrenched themselves at Meremere, which commanded the River.

Meanwhile, in September, 1863, a party of the enemy, about two hundred strong, was encountered by Captain Lusk and his Forest Rifle Volunteers, in the dense bush which environed Mauku, a settlement about thirty-four miles from the Manukau, and after a fight from tree to tree the enemy retreated with a loss of six killed. Another affair of slight importance took place at the Pukekohe Church, some eight miles distant, on the 15th. The series of skirmishes culminated on the 23rd of October, in a desperate action which has been termed the "Battle of Bald Hills." Three hundred of the Ngatimaniapoto, under two of Rewi's relatives, together with fifty of the Ngatiporou, eluding the vigilance of the British forces which confronted the enemy at Meremere, passed safely



THE BATTLE-FIELD OF MAUKU.

down the Waikato River, and landing below Tuakau, avowed their determination to kill all the settlers between that place and Auckland. Fortunately, the Mauku Stockade was garrisoned by Captain Lusk and his company of Forest Rifle Volunteers, besides twenty men of the First Waikato Regiment, under Lieutenant Percival, while at the Church farther up the valley were thirty men of the same regiment under Lieutenant Norman. Captain Lusk, in reconnoitring, came upon a party of the enemy evidently intent upon shooting cattle. He sent for assistance, and meanwhile entrenched himself in the Church Redoubt. After waiting about six hours without any sign of activity on the side of the enemy, Lieutenant Percival determined to make a bold push and compel the Maoris to show their hand. He therefore brought on an engagement, and Captain Lusk moved out to his support. The enemy retired to the edge of the forest, where it subsequently transpired the rest of their force lay concealed.

However, the ruse was suspected, and the volunteers were ordered to change front. The entire body of natives immediately broke from their cover and charged, while their opponents, in unbroken order and maintaining a well-directed fire, fell slowly back upon the shelter of the bush. After a very smart engagement, in which part of the enemy assailed their foe hand-to-hand, the Maoris retired with a loss of thirty-two killed, besides many wounded. The volunteers lost eight killed, the first to fall on the side of the assailants being Lieutenant Percival.

By the 30th of October, General Cameron had been provided with two bullet-proof steamers, one of which, the *Rangiriri*, was built in Sydney for the New Zealand Government, and he therefore prepared to besiege Meremere. The natives, however, evacuated it, and retired upon Rangiriri, about twelve miles distant, on the right bank of the Waikato. It was flanked on the other side by the Waikare Lake and Swamp, and had been strongly fortified. On the 20th of November it was attacked by two divisions. One of them, numbering seven hundred and seventy men, with two Armstrong guns, proceeded by land; the other, consisting of five hundred men of the Fortieth, embarked in one of the iron-plated steamers, which was accompanied by five small gun-boats. The enemy was between four and five hundred strong. The main force was to operate from the front, and the River detachment from the rear. A delay of an hour and a half was caused by the steamer running on the sand-bank. Meanwhile shot and shell were being poured into the entrenchments at a range of six hundred yards. Then followed four separate assaults, each of which was repulsed. The first was led by the Sixty-fifth, and it drove the enemy into a central redoubt. Captain Mercer and thirty-six of the Royal Artillery next assaulted the redoubt, and the gallant officer received his death-wound in the attempt. One hundred volunteers of various regiments also stormed the citadel, but their scaling-ladders were found to be too short. Finally, Commander Mayne, of *H.M.S. Eclipse*, advanced at the head of ninety men of the Naval Brigade, but was also driven back. By this time the Fortieth had landed in the rear, and rushing the rifle-pits on that side drove their occupants into the Swamp, where they were shot down. Darkness did not interrupt the operations. A sap was opened and hand-grenades were poured into the devoted citadel, with the unfortunate result that a hut containing wounded was set on fire, and several poor wretches were burned alive. The enemy replied with a desultory fire. In the morning, seeing that they were completely surrounded, they hoisted a piece of calico on a spear and capitulated. The King and the chief Tamihana had effected their escape, but one hundred and eighty-three men and two women, and one hundred and seventy-five stand of arms, fell into the hands of the British. These prisoners were sent on to Auckland. The casualties on the English side were two officers and thirty-five men killed, and thirteen officers and eighty-five men wounded, while the Maori losses have been variously estimated at from fifty to one hundred and fifty. Colonel Austin, of the Fourteenth, Captain Phelps and Ensign Ducrow, as well as Captain Mercer, died of their wounds.

The Governor declared that he would dictate terms of peace at Ngaruawahia, and, as if to pave the way for that intention, the enemy fell back from their capital, allowing General Cameron to march in and occupy it without a struggle. But the expected terms of peace were not proclaimed, and the war continued. Tamihana had

been beaten. Rewi, however, was still unsubdued. From the 8th of December till the 27th of January, 1864, General Cameron lay at Ngaruawahia awaiting supplies. He then established himself at Te Rore, and threw out an advanced post within fourteen hundred yards of Paterangi, forty miles up the Waipa, where the Maoris had strongly entrenched themselves. A sharp skirmish at Waiarei was marked by the gallant rescue of a wounded soldier by Major Heaphy, who won the Victoria Cross thereby. As Paterangi was too strong to be stormed without heavy loss, General Cameron marched out of Te Rore on the night of the 20th of February with a force of one thousand men, and, guided by a settler named Edwards, appeared before daylight at Te Awamutu, where the Maoris were surprised in their beds. From Te Awamutu he pushed on to Rangiaohia, where he similarly took the natives by surprise. A running fight, however, was maintained among the huts of the village, where Colonel Nixon and other officers of the Colonial Defence Corps were mortally wounded. The natives were dislodged. General Cameron withdrew his forces for the night to Te Awamutu, but early next morning it was found that the enemy, to the number of about four hundred, had evacuated Paterangi, and were entrenching themselves at Rangiaohia. A detachment of the Fiftieth Regiment was immediately sent forward, and, charging with the bayonet, routed the enemy from the cover of an old bank fence, whither the Mounted Defence Force



REWI MANI POTO.

drove them into the swamp and bush. The main forces of the military were next concentrated at Pukerimu for the reduction of the hill stronghold of Maungatautari, on the Horotiu, about fifteen miles north-east of Te Awamutu. Here the enemy had assembled in force, the position being considered almost impregnable. It was also regarded as their only remaining fortification in the Waikato proper.

Rewi, however, had abandoned the Hunua Forest, and was fortifying himself at Orakau, about three miles from Kihikihi, where he made a stand that has shed imperishable lustre upon his race, and which will always be memorable as the scene of one of the most notable instances of Maori heroism. On the 30th of March, Brigadier-General Carey, the Eighteenth Royal Irish, reconnoitred the position and determined to attack it. Collecting a force of about one thousand men, with three guns, he made a night march and appeared before the *pah* at day-break, when he so disposed his men as to completely surround the enemy. He thus placed the Maoris at a serious dis-

advantage, of which he hastened to avail himself to the utmost by completing his measures to cut off all chance of escape. The *pah* was constructed with the usual ditches and parapets, with an outer circumvallation of posts and rails, protected by outlying rifle-pits. It was defended by about three hundred men, women and children, but was badly provisioned for a siege. General Carey unwisely resolved to commence operations by storming the *pah*. After two assaults by the Eighteenth Royal Irish and Forest Rangers respectively, led by Captain Ring of the Eighteenth, and Captain Fisher of the Fortieth

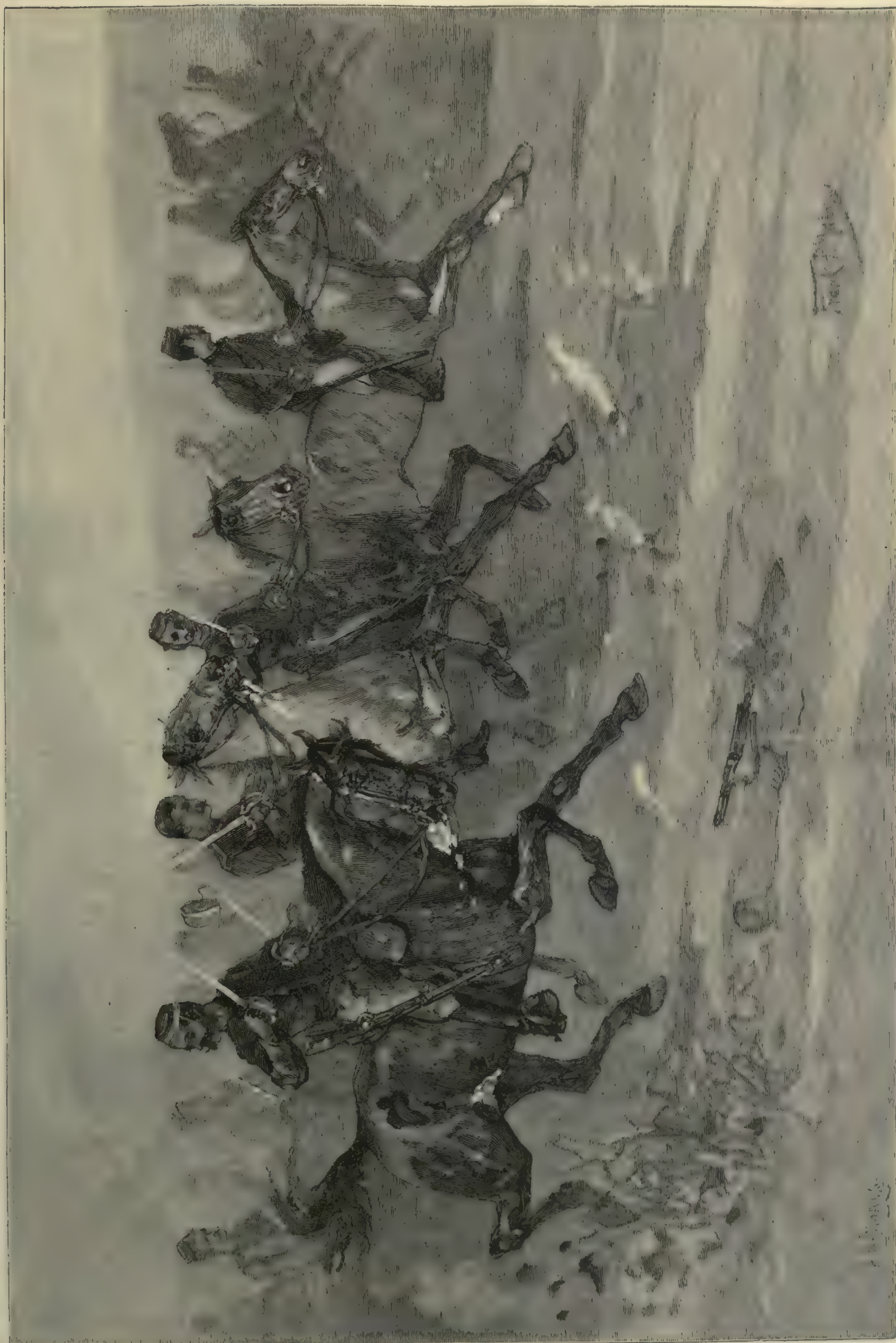


RANGIRIRI.

—in which the former officer fell mortally, and the latter severely, wounded—and after a third assault, led by Captain Baker, of the Eighteenth, these tactics were relinquished, and the construction of a flying sap was begun, while a continuous fire of shot and shell was kept up, as well as a perfect hail of musketry, no less than forty

thousand rounds of cartridges being served out to the troops. During the afternoon a relief force of from one hundred and fifty to two hundred natives appeared in sight, but could get no nearer than the edge of a bush some nine hundred yards to the rear of the British outposts. General Cameron arrived with re-inforcements, which brought the strength of the investing force to upwards of two thousand men.

By the 2nd of April, the flying sap which had been commenced had broken into the enemy's outworks, and while canister was fired from two Armstrong guns into the *pah* at a distance of a few yards, the fire of the doomed garrison was silenced by hand-grenades thrown into the entrenchments. Impressed by their indomitable courage, and desirous of saving the women and children, General Carey now sent forward an interpreter, Mr. Mainwaring, to the head of the sap, with the message: "Friends, hear the word of the General—Cease your fighting; you will be taken care of, and your lives spared. We have seen your courage; let the fighting stop." Instantly an old tattooed chief mounted the breastwork, and, in a clear ringing voice, shouted the intrepid reply: "Friends, this is the reply of the Maori—We shall fight on, *ake, ake, ake*, (for ever, for ever, for ever)." "If you are determined to die," replied the General, "give up your women and children, and we will take care of them." The defiant answer was, "Who is it that is to die? Wait a little; our women also fight." "Let your word be repeated," persisted the General. "Enough," was the chief's response, "this, *ake, ake, ake*, is our last word; we shall fight on for ever!" Can the bloody annals of war furnish an episode to excel this for its patriotism and dauntless spirit? The soldier felt that in the half-civilized savage he had a foeman worthy of his steel. But the full



THE CHARGE OF THE NEW ZEALAND CAVALRY AT THE BATTLE OF ORAKAU.

horror of the enemy's situation was not known till afterwards. When they thus elected to die rather than surrender, they had been three days without a drop of water, and had nothing to eat but a scanty supply of dried *tawa* berries and raw maize! Immediately after the firing was resumed, a soldier of the Eighteenth, throwing his cap over a partial breach, rushed after it, and was followed by Captain Hertford and twenty men of the Colonial Defence Force. The enemy, packed into a corner, received them with a withering volley, before which the officer and ten men fell. Shortly afterwards the Sixty-fifth and the militia made an assault on the opposite side of the works, and were also repulsed. The enemy, having now exhausted their ammunition, left the *pah* on the side which was invested by a double line of the Fortieth, under Colonel Leslie, and jumping over the trench concealing the first line, were actually through the second line before they were discovered. The column of natives—with the women, the children and the leading chiefs in the centre—marched as steadily towards their place of refuge as if no danger threatened them; but, as soon as the yells of the troops proclaimed that the retreat had been discovered, they quickened their pace and made with all speed towards a neighbouring swamp. A body of colonial cavalry and mounted artillery, together with the Colonial Forest Rangers, under Captains Jackson and Von Tempsky, however, headed them as they emerged from the swamp, and under a deadly fire the little band was almost decimated. The Maoris lost about two hundred. Upwards of one hundred bodies were picked up on the field, and twenty were said to have been buried in the entrenchments. Twenty-six wounded and seven unwounded were taken prisoners, and of the wounded twelve were women and children. Rewi, with a small party of seven or eight, escaped. The British loss amounted to sixteen killed and fifty-two wounded.

General Cameron returned to Pukerimu to resume operations against Maungatautari, but, on the morning of the 5th of April, he found that it had been evacuated. This practically ended the Waikato War, in which an able general, at the head of twenty thousand men, had been fighting an enemy whose numerical strength did not exceed one thousand men; a war, too, which involved the colony in a debt of three million pounds, besides Imperial claims incurred on account of military expenditure. To this may also be added the devastation of prosperous settlements, and general hardship consequent upon all the able-bodied men in Auckland being kept under arms and forced to perform military service, to the unavoidable detriment of their customary avocations. To the Ngatihaua tribe the war brought ruin, for almost all their lands were included in the general confiscation scheme, while the Ngatimaniapoto tribe, which had practically provoked hostilities, lost very little territory. The new frontier line was drawn from Raglan, on the west coast, through the rich plains of Upper Waikato to Tauranga, and the lands confiscated by the Government were settled with military and volunteer settlers. Tamihana died of consumption in December, 1866.

THE EAST COAST CAMPAIGN.

But though peace once more reigned in the Waikato, the insurrection had not been quelled. Tauranga, in the Bay of Plenty, is only forty miles distant in a straight line from Pukerimu; it is virtually the port of the Waikato; and large bodies of its natives

were known to have assisted in the war. In the middle of January, 1864, General Cameron had written to the Governor urging him to send an expedition thither. The result was that Lieutenant-Colonel Greer, of the Sixty-eighth Regiment, was posted with five hundred men at Te Papa Mission Station. The east coast tribes were reported to be preparing a large invading force, but for a time they were held in check by the friendly Arawa tribe. After the fall of Orakau, those of the Tauranga natives who had been engaged in the war, began to return, accompanied by parties of Waikatos, and to



THE GATE "PAH" AFTER THE CONFLICT.

entrench themselves in a strong position about three miles from Te Papa. It was situated on a narrow neck of land flanked by swamps, and received the name of the "Gate Pah." It contained a redoubt, was well palisaded, and was also defended by rifle-pits. But its garrison, numbering not more than three hundred—according to their own account only one hundred and fifty—had no artillery and no water. Colonel Greer having asked for re-inforcements, Gen-

eral Cameron moved his head-quarters to Tauranga, and, on the night of the 27th of April, the *pah* was surrounded by a force of one thousand seven hundred rank and file, while artillery was planted in four batteries at distances ranging from eight hundred to one hundred yards from the works.

On the morning of the 28th, the garrison discovered the skirmishers of their opponents, and fired a volley at them. The four batteries then opened fire, and kept it up with unslackened vigour until late in the afternoon, one who was present declaring subsequently that the rain of shot and shell was "enough to have smothered Sebastopol." By four p.m. one corner of the *pah* had been breached, and one hundred and fifty seamen and Marines, with an equal number of the Forty-third Regiment, were told off to make the assault. One hundred and seventy men of the Seventieth were extended as a covering party, and three hundred seamen, Marines and men of the Forty-third, followed as a reserve. As the storming party, headed by Commander Hay, of *H.M.S. Harrier*, and Colonel Booth, of the Forty-third, entered the breach with a cheer, the Maoris attempted to escape by the rear, but finding the Sixty-eighth closing in there they turned back and faced their assailants. The cry arose that the natives had been

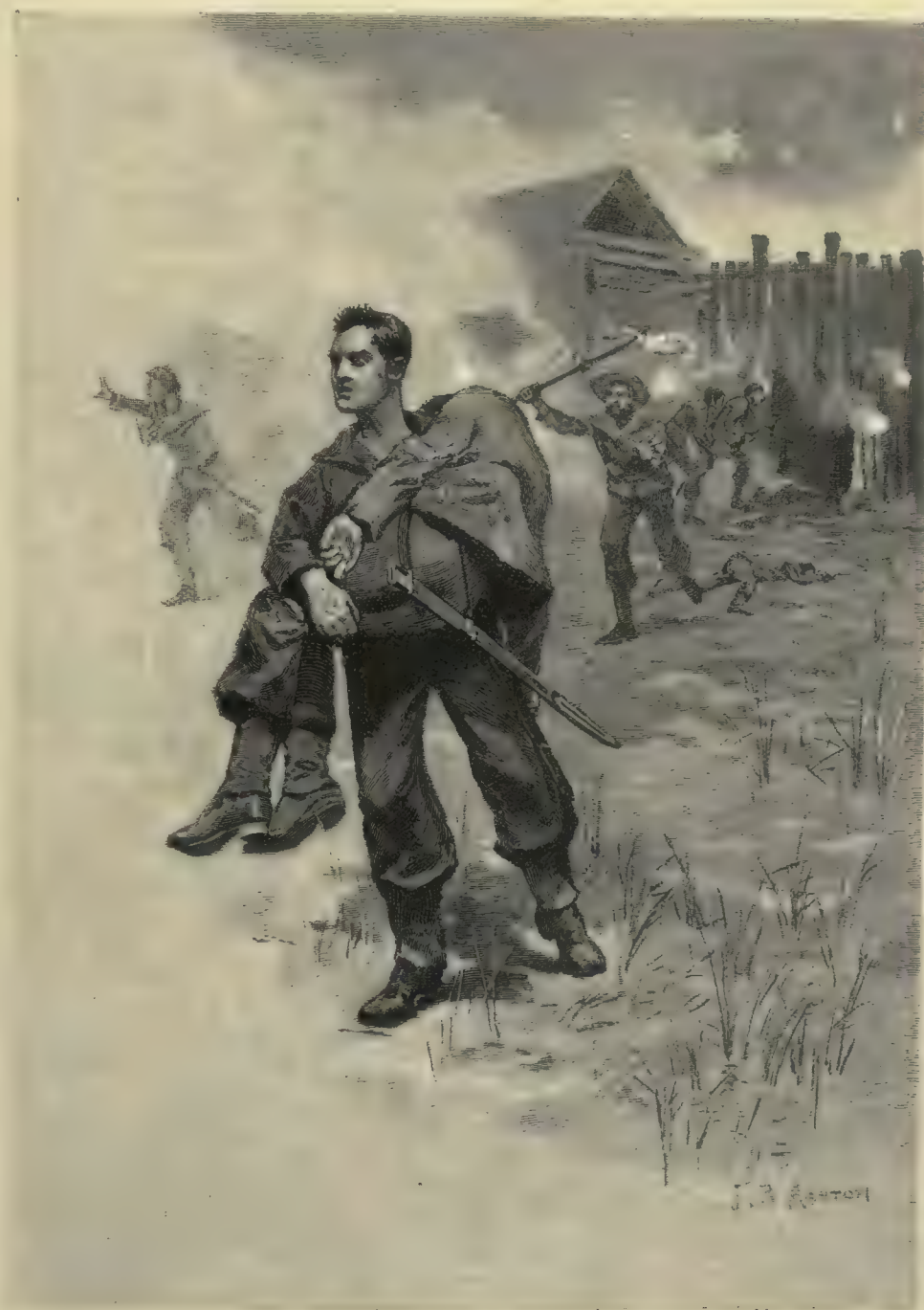
re-inforced, and, seized with a panic, the men rushed headlong out of the breach, crying out, "There's thousands of them!" Captain Hamilton, of *H.M.S. Esk*, rushed up with the reserve of the Naval Brigade in order to rally the fugitives, but he was shot through the head as he mounted the breach. The enemy poured in their fire on the flying column with terrible effect. Most of the officers were shot down, and both leaders of the storming party were mortally wounded. Of the various acts of individual heroism which relieve the gloom of this unfortunate affair, the most notable was that performed by Samuel Mitchell, captain of the foretop of *H.M.S. Harrier*. Seeing Commander Hay struck down by a rifle shot, the gallant fellow did not hesitate a moment amid the pitiless hail of lead to encumber himself with the body of the wounded officer, and at his own extreme peril to bear it back to the British lines. But Commander Hay was past all human succour. The enemy's bullet had lodged in the abdomen, and he expired a few hours later. Mitchell's intrepidity was duly recognized, and he was recommended to the Admiralty for the Victoria Cross.

A line of entrenchments was now thrown up, by order of General Cameron, within one hundred yards of the works. About midnight the Sixty-eighth were heard firing at the rear of the *pah*, and on examination the stronghold was found to have been abandoned. Some of the British wounded were in it, alive, and with no complaint to make against the enemy. The British loss amounted to twenty-seven killed and sixty-six wounded, of whom several died of their wounds. Only ten Maoris were found dead in the *pah*, but it was stated that some others had been carried off. The natives now entrenched themselves at Te Ranga, about three miles inland from the Gate *Pah*, and here they were followed on the 21st of June by Lieutenant-Colonel Greer with a detachment of the Forty-third, Sixty-eighth and the First Waikato Regiment, besides a corps of cavalry and some artillery. The enemy had not completed their works, and were therefore in a state of unreadiness. An artillery fire was opened upon them, and then the troops advanced with the bayonet, the Forty-third leading. A hand-to-hand fight ensued in the trenches, while those of the enemy who tried to escape were sabred by the cavalry. The assault proved a complete success, and the Maoris were almost annihilated. They lost one hundred and nine in killed, and nineteen in wounded, of whom twelve died of their wounds. Only eleven unwounded prisoners were taken. The New Zealand troops lost eight killed and thirty-nine wounded. The remnant of the Ngaiterangi submitted, and though the rest of the enemy retreated to the hills bordering the Waikato, and made no overtures for peace, the campaign was ended.

THE "HAUHAU" FANATICISM.

Before proceeding further we must now return to the events of the second Taranaki War, which followed the massacre of the escort at Oakuru. That unfortunate occurrence took place in May, 1863, and, on the 3rd of June, General Cameron marched out from New Plymouth, with detachments of the Fifty-seventh and the Seventieth, besides artillery, and successfully stormed a native redoubt on the Katikara River, with a loss of one killed and five wounded, while twenty-four of the enemy were slain. After this the troops were recalled to Auckland for the invasion of the Waikato, but a portion of the Fifty-seventh was left behind under Colonel Warre to garrison New Plymouth. The

latter half of 1863 passed away quietly on the west coast, a few trifling brushes with the enemy serving but to keep the garrison on the *qui vive*. In March, 1864, an attempt, under Major Butler, to take a *pah* at Kaitake, was repulsed with a loss of one killed and six wounded. In April, a more serious reverse was sustained. Captain Lloyd, with fifty-three men of the Fifty-seventh, and forty-one Melbourne volunteers under Captain Page, was out foraging and destroying the enemy's crops at a native village called Ahuahu, when he was surprised, and after some firing his men retreated in disorder, leaving their dead and wounded behind. The casualties amounted to seven killed and ten wounded. When the bodies of the slain were recovered they were stripped nearly naked and decapitated—a barbarity hitherto unheard of. Strangely enough, this savage mutilation of the dead proved to be one of the rites of a new religion that had just arisen, and which was destined to achieve considerable notoriety



AN INCIDENT AT THE GATE "PAH."

under its name of *Hauhauism*, although its votaries at first called it "*Pai Marire*."

This religion was evolved from the inner consciousness of a native of weak intellect named Te Ua, who either believed, or pretended, that he had received a revelation from the Angel Gabriel. After pondering over the various religious beliefs with which he was acquainted, he compounded a curious jumble of the leading forms of Christianity, Judaism and Paganism, gave it a name, and promulgated among its distinctive tenets free love, disregard of the Sabbath and the Scriptures, hostility to Europeans, angelic guidance for its believers, and invulnerability in battle by the utterance of the magical

word "*Hau*," accompanied by mesmeric passes of the hand. Finally, its priests and prophets were endowed with superhuman powers. Part of its ritual consisted in dancing round a lofty pole called a "*Niu*," chanting gibberish, interspersed with the names of Jehovah, the Virgin Mary, Gabriel and Joshua, whose spirit led them in battle. Their enemies were decapitated in order that their heads might be hung upon the "*Niu*." Captain Lloyd's head was embalmed and carried about as an oracle or medium of communication with Jehovah. On Saturday, the 30th of April, 1864, the *Hauhaus* tested their boasted invulnerability by attacking the Sentry Hill Redoubt, six miles north of New Plymouth. They advanced in a close column, four deep, throwing their arms about, and yelling the word "*Hau*," with an effect which resembled the barking of dogs. The garrison—seventy-five men of the Fifty-seventh, under Captain Short—received them with a destructive volley, backed up by a discharge of grape. For some time the enemy stood this deadly fire, but at last they turned and fled, leaving thirty-four killed and wounded.

Despite this check, the singular frenzy spread. Fortunately for the settlers of Wanganui, the friendly Maoris in that district resisted the progress of the *Hauhaus* down the River, and invited them to a pitched battle on the island of Moutua. The *Hauhaus*, to the number of three hundred, accepted the challenge, and the fanatics were cut to pieces, losing, among others, the prophet Matene. The Provincial Government of Wellington raised a monument to the memory of its allies who had fallen in this encounter. For the rest of the year the colony enjoyed repose, which was not even interrupted by the escape of two hundred and fourteen Rangiriri and other prisoners from the island of Kawau, near Auckland, in September. With the opening of 1865, operations were resumed on the west coast, the disaffected natives having opposed the construction of a road between Wanganui and New Plymouth, and closed the Waitotara block. In January, General Cameron set out with a force of two thousand men from Wanganui, and marched along the coast-line to the Waingōngoro, to the derision of the enemy, who attacked him boldly at Nukumaru, on the south bank of the Waitotara, where he would have been defeated with loss but for the timely arrival of a reserve of friendly natives. He declined to penetrate inland, owing to the refusal of the Governor to apply for re-inforcements of two thousand men, without which the General maintained it was impossible to open up communication, or to reduce a strong native *pah* at Wereroa. In consequence of his strained relations with the Governor, which were marked by a very acrimonious correspondence, the General went into winter quarters in April. Thus thrown upon his own resources, Sir George Grey collected a force of three hundred and nine friendly natives under Major McDonnell, and one hundred and sixty-four Forest Rangers and Wanganui Cavalry under Major Rookes, and accompanied them to the dreaded Wereroa *Pah*, which fell into their hands on the 21st of July without a struggle, fifty *Hauhaus* being taken prisoners. After this, Major Brassey was relieved at Pipiriki, where he had been beleagured. The line of coast from Wanganui to New Plymouth had also been opened from end to end after Cameron's departure from Auckland, and, as early as February, the Wanganui friendlies, under Hoani Wiremu Hipango, had defeated the *Hauhaus* severely at Okotahi, but the brave chief himself fell.

On the 1st of August, General Cameron resigned command of the troops, and was



MAIL STEAMER LEAVING AUCKLAND.

succeeded by Major-General Trevor Chute. On the 2nd of September, peace was proclaimed to all west coast rebels, excepting the murderers. While the troops remained at Wanganui there was work of a crucial character on the east coast for the Colonial Forces to undertake. Thither had proceeded the *Hauhau* fanatics from Taranaki, and on the 2nd of March, 1865, a party of them signalized their arrival at Opotiki by hanging the Rev. C. S. Volkner, a Lutheran missionary, who had joined the Church of England. They then drank his blood, while their leader, Kereopa, intensified the horror

of the atrocity by gouging out and swallowing his victim's eyes. Four months later, another party of *Hauhau*s at Whakatane, on the same coast, murdered the captain and crew of a small schooner, and a half-caste Government interpreter named Falloon. So shocked were the great body of the Maoris by these excesses that Tamihana wrote to Colonel Greer, tendering submission on behalf of himself and the King. Two expeditions were sent to the disturbed district—one of one hundred Europeans, which arrived at Waiapu in August, to

co-operate with the four hundred or five hundred natives who had already begun the campaign under the chiefs Mokena and Ropata Wahawaha, the other of five hundred and eighty men from the Colonial Forces and Native Contingent, which went from Wanganui to Opotiki in September.

This latter expedition, under Majors Brassey and McDonnell, effected a speedy conquest of the Opotiki District, and, in November, was recalled to Wanganui. The Waiapu Expedition, under the joint command of Majors Fraser and Biggs, and powerfully supported by Ropata's strong body of Maoris, achieved still more signal results. Late in September the *Hauhau* stronghold of Hungahungatoroa surrendered, and two hundred Ngatiporou, with three hundred women and children, were made prisoners. In November, a force of one hundred and ten Europeans, and two hundred and fifty Maoris, besieged the fortified *pah* of Waerenga-a-hika, and, after an engagement in which the enemy lost seventy or eighty men, carried the position, and made three hundred prisoners.



THE SOLDIERS' GRAVES AT TAURANGA.

From a Sketch by E. Gouldsmith

The worst characters were transported to the Chatham Islands, amongst them being the subsequently notorious Te Kooti, who, although professedly on the British side, was suspected of being a spy, and punished accordingly without any form of trial. About the same time the Arawa tribe, under Major Mair, inflicted a crushing defeat upon the *Hauhaus* at Te Teko, near Matata, in the Bay of Plenty, and took upwards of eighty prisoners, including the prophet Te Ua, and twenty-eight natives alleged to have been concerned in Falloon's murder. Meanwhile, trouble had arisen in the Wanganui District. The disaffected Ngatiruanui, in October, murdered the envoys of peace that were sent to them, and at the end of December, General Chute marched against them from Wanganui with a small force of the Fourteenth and of the Royal Artillery, strengthened by two hundred of the Native Contingent under Major McDonnell. He took his way through the enemy's country, and, re-inforced by detachments of the Eighteenth and Fiftieth, penetrated through the bush to New Plymouth, where he received quite an ovation. He then marched by the coast to Patea, where the campaign ended on the 7th of February, 1866. This was the last occasion on which Imperial troops were actively engaged in New Zealand. The strength and spirit of the enemy had by this time been broken by their repeated reverses, although a kind of desultory warfare was kept up with Colonel McDonnell until the end of October.

TITOKOWARU'S OUTBREAK.

During 1867, the colony again tasted the blessings of peace; but by the middle of 1868 the North Island was once more convulsed in the throes of war. Titokowaru, a leading chief on the west coast, and an acknowledged *Hauhan*, rose in rebellion, and, after some pillaging and murdering in the Patea District, a section of his forces attacked the Turuturumokai Redoubt, where twenty-five men were stationed under Captain Ross. They surprised the garrison on Sunday morning, on the 12th of July, and cut it to pieces, Captain Ross and nine of his men being killed. The rest escaped, five of them being wounded. Major Von Tempsky and his Forest Rangers held the field until the arrival of Colonel McDonnell with re-inforcements. On the 21st of August, the latter officer attacked the stronghold of Te Ngutu-o-te-manu ("The Beak of the Bird"), and captured it with a loss of four killed and ten wounded. Early in September a disastrous repulse was sustained at Ruaruru, Titokowaru's own fastness. It was assailed by Colonel McDonnell with a force of two hundred and fifty Europeans and one hundred Wanganui natives. The enemy, protected by the dense scrub, and with their marksmen posted amid the branches of a clump of *rata* trees within the palisading, did such terrible execution that the assailants were compelled to beat a retreat, leaving behind them nineteen killed and twenty-five wounded. Among the slain were the gallant Von Tempsky and Captains Buck and Palmer, and Lieutenants Hastings and Hunter. Shortly after this action, Colonel McDonnell gave up the command, and was succeeded by Colonel (now Sir George) Whitmore. Under this officer another repulse was met with at Okutuku, or Moturoa, on the 7th of November. He engaged the enemy with a mixed force of two hundred and sixty-six Europeans and eighty Maoris, and, after a hard fight of five and a half hours, was obliged to retire, the casualties being Major Hunter and six men killed, twenty wounded, and twelve missing. Titokowaru now

approached Wanganui, burning settlers' houses and creating general consternation, which was intensified by the news of the massacre by Te Kooti at Poverty Bay. At this juncture, Colonel Whitmore was ordered with all his available forces to Poverty Bay, and Titokowaru was thus left in possession of the field. One hundred of the Armed Constabulary, with two hundred and ninety militia and volunteers, were entrusted with the protection of Wanganui and the preservation of the Kai-iwi frontier line. In January, 1869, Colonel Whitmore returned and resumed his operations against Titokowaru, who retired to the forests beyond Moturoa, where his last victory had been won. He planted ambuscades, and one of these succeeded in surprising ten of the volunteers who were gathering peaches in a grove, and shot down seven of them.

Meanwhile, the undaunted Kepa te Rangihwinui and his brave Wanganuis were scouring the country near Putahi, and rendering the colony yeoman service. On the 13th of February, 1869, a war-party of the Ngatimaniapoto from Mokau pounced upon



VOLKNER'S CHURCH.

the British redoubt at Pukearuhe, or the White Cliffs, thirty-six miles from New Plymouth, and massacred Lieutenant Gascoigne, his wife and three children, as well as two other Europeans. Just after the tragic deed had been perpetrated, the Rev. John Whiteley, a Wesleyan missionary, was seen approaching on horseback. The Maoris shouted for him to go back. He held on his way, however, and was then shot down. This was never avenged. Colonel Whitmore and Major Kepa pursued Titokowaru to the Upper Wanganui, where he remained safe from further molestation.

TE KOOTI AND THE POVERTY BAY MASSACRE.

Incidental reference has been made to Te Kooti and the frightful massacre with which his name will for ever be associated. It is at this stage of our narrative that the salient episodes in which he figured must be introduced. Expatriated to the Chathams merely on suspicion, he seems to have given very little trouble to his guards, while over his fellow-prisoners he gradually established an ascendancy by professing to be inspired. The promise had been held out to the exiles that, if they conducted themselves well, they would be allowed to return home in two years. But when this period had elapsed the hope of release seemed as remote as ever. It was then that Te

Kooti mooted the subject of escape. The plan was feasible, for the garrison had been reduced to fifteen men. On the 3rd of July, 1868, the arrival of the schooner *Rifleman* with stores presented the desired opportunity. The captain was on shore the following day, and a party of the prisoners was assisting to discharge cargo, when at a preconcerted signal from Te Kooti, they rose, clove in the skull of the only guard who offered resistance, overpowered and bound the rest, boarded the vessel, seized the crew, and ordered the mate on pain of death to navigate them to New Zealand. He consented to do so, and no further violence was exhibited. The women and children on the Island were not interfered with. Te Kooti possessed himself of the contents of the treasury, which amounted to within a few shillings of four hundred pounds, secured about forty stand of arms and ammunition, shipped the one hundred and sixty-three prisoners with their sixty-four women and seventy-one children, and, in order to prevent pursuit, cut the cable of the ketch *Florence*, the only other vessel in port, and sent her crew ashore. Sail was made from the Island the same evening, and on the 10th of July, the *Rifleman* arrived at Whareongaonga, six miles south of Gisborne, then known by its native name of Turanganui. Here, the fugitives landed with their plunder, and the mate and crew were sent off to resume their voyage. With strange indifference to the security of the settlers, they sailed away for Wellington, two hundred and fifty miles distant, instead of promptly giving the alarm at the nearest settlement. At this time Poverty Bay was occupied by about four hundred and fifty natives and two hundred Europeans.

On the 11th of July, Major Biggs, the Resident Magistrate, was apprised of the presence of armed natives in the district, and on the 12th, he set out in pursuit with a force of eighty Maoris and forty Europeans. He came up with the escaped prisoners at Whareongaonga, and summoned them to surrender. Te Kooti scornfully declined to submit, but intimated that he would not molest anyone unless his freedom were threatened. Major Biggs retired, and, while collecting re-inforcements, dispatched his available forces under Captain Westrupp to watch Te Kooti, who was now at Paparatu. This officer engaged the enemy, and was forced to retreat with a loss of two killed and ten wounded, leaving all his horses, saddles, baggage, swords and accoutrements, to a value of one thousand two hundred pounds, in his adversary's hands. Although encumbered by his women and children, as well as goods, Te Kooti cut his way through the forest, and repulsed a small force under Captain Richardson, besides fighting an indecisive engagement with Colonel Whitmore at Puketapu, forty-five miles inland, after which the leader of the Colonial Forces fell back with loss. The enemy then remained encamped where they were until the 28th of October, receiving continued accessions of disaffected natives. Colonel Whitmore returned to Waitotara with his forces, and Poverty Bay was left virtually defenceless. The settlers appealed to the Government for protection, but the Authorities seemed determined to court disaster, for they ordered the discontinuance of a strong redoubt which the loyal natives had begun to erect at Matawhero. This proved to be an act of suicidal folly. On the night of the 9th of November, Te Kooti marched from his retreat, surprised the village of Matawhero, and with cold-blooded ferocity, butchered the settlers in detail, the work of blood being continued during two days throughout the whole district. The particulars are revolting. Suffice it to say that twenty-nine Europeans and thirty-two loyal natives were massacred,

not even the decrepitude of age, the distress of women, or the innocence of childhood moving the murderers to compassion. Captain Wilson and Major Biggs were among the first victims. A lad named Charles James escaped to relate the dreadful news. The settlers fled in all directions, the women and children in Gisborne were shipped off to Auckland, and the deserted homesteads of Poverty Bay were given by Te Kooti to the flames. Laden with booty he retired once more to his forest retreat, and the traces of his bloody deeds marked his progress.

At length Ropata discovered his hiding-place, perched on the loftiest point of the forest-clad peak of Ngatapa, where he had constructed the most impregnable *pah* ever seen in New Zealand. Without waiting for re-inforcements the heroic Ropata assaulted him there and inflicted a loss of sixty-five men. Lack of ammunition and weakness of support ultimately compelled him to fall back. Then Colonel Whitmore arrived, and the combined forces invested the *pah*. Ropata stormed it with fifty men, and possessed himself of the first line of defence. While a sap was being pushed forward to the second line, Te Kooti, under cover of darkness, drew off his forces and escaped. Ropata pursued him, and captured about one hundred and twenty prisoners, all of whom were summarily shot.

Three years of guerrilla warfare followed. The name of the fugitive chief became a synonym for rapine and terror. Ever pursued and ever on the move, he emerged from the forests at intervals, swooping down on isolated settlements, plundering and cutting off small parties of Europeans and friendly natives, and in his turn sustaining loss at the hands of his pursuers. Through the highlands of the savage Uriwera, over Hawke's Bay, and by way of Taupo, he was dogged to the Waikato, where the King would have nothing to do with him. In despair, he sent word to the Europeans of his desire for peace, but the Government replied by setting a price of five thousand pounds on his head. In 1870, the chase was left almost exclusively to the Maoris under Ropata, Topia, Henare Tomoana, and Kepa te Rangihwinui. Te Kooti fled back through the Bay of Plenty to the almost impenetrable forests south of Opotiki, where his *pah* of Maraetahi was besieged in March, 1870, by four hundred friendlies under Kepa, Topia and Wi Kingi. After a desperate action, in which the arch-marauder barely escaped with his life, the assailants carried the *pah*, recovered two hundred and eighteen captives, and took prisoners thirty-five men and seventy-six women and children. Eighteen of the enemy were killed. Te Kooti now crept from lair to lair in the forest solitudes, tirelessly pursued, and with his followers diminished to a score. Emaciated with hunger, feverish with thirst, unable to rest through fear of capture by the indefatigable Ropata, he regained at last the King country, and there found sanctuary in 1872. Years later he was pardoned, and since then has led a quiet



MAJOR-GENERAL TREVOR CHUTE.

life. He has often wished to revisit Poverty Bay, but the stern hostility of the settlers has wisely caused the Government to restrain him. In 1871, the Ngatiporou seized Kereopa, Volkner's murderer, and he was duly tried and executed.

TE WHITI'S LAND AGITATION.

The name of Te Whiti, prophet, orator and leader in a remarkable land agitation, figures prominently in the history of New Zealand during the past twelve years. Had he been of bellicose instincts, he wielded the power to have provoked a war of races which would have drenched the country in blood. But, happily, he was a man of peace, and of rare force of character. In 1865, he restrained his people from embroiling themselves in war, and in 1868, he prevented them giving countenance to Titokowaru. From his village of Parihaka, between Mount Egmont and the sea, he exercised a beneficent influence, exhorting his people to peaceful pursuits, prohibiting any traffic in drink within his settlements, inculcating temperance, and preaching love between the races. He assumed the functions and pretensions of an inspired prophet, and at monthly meetings harangued the tribes with great eloquence upon passing events.

In 1877, the first signs of agrarian trouble were manifested. For twelve years the Authorities had allowed the confiscation scheme of 1865, so far as it related to Taranaki, to remain in abeyance, and the Maoris had long ago concluded that it had been abandoned. This opinion was strengthened by the fact that, between 1872 and 1875, no less than one hundred and eighty-five thousand acres of land within the bounds of the Waitotara and Waingongoro Rivers had been purchased from them, no question being raised as to the validity of their title. Neither had any step been taken to proclaim the reserves which were to accompany confiscation. In 1877, the dream of security was rudely disturbed. The Government made preparations to survey the confiscated Waimate Plains, now dotted over with native settlements and cultivations. Despite the protests of the aboriginal settlers, the survey was commenced in August, 1878. The pegs mysteriously disappeared after they were put down, and finally, in March, 1879, the surveyors having taken a road line through a large enclosure belonging to Titokowaru, were courteously conducted off the Plains, with an intimation that the survey could not go on. The Government advertised sixteen thousand acres for sale, and in May unarmed bodies of Maoris began ploughing lands which the Government had given to military settlers. Armed settlers removed one party of the dusky plough-men, but they quietly returned and resumed operations. On the 30th of June, seventeen plough-men were arrested by the Armed Constabulary, while the settlers made violent threats of shooting all Maoris who again attempted to plough. During July the



MAJOR ROPATA.

Maoris in small bands continued to plough, and the Constabulary to make arrests which were never resisted, until at the end of the month one hundred and eighty men were in custody. Forty were sentenced to two months' imprisonment for malicious injury to property, but the rest were never brought to trial. Notwithstanding the declaration in Parliament of the Hon. J. Sheehan, then Native Minister, that "from the White Cliffs down to Waitotara the whole country is strewn with unfulfilled promises," and that "grants have been kept back until the people have come to the conclusion that the whole thing



TE WHITI'S VILLAGE OF PARIHAKA.

is a sham and a delusion, the promised reserves had not been proclaimed. Te Whiti went on preaching passive resistance, counselling his followers to abstain under all provocation from anything in the shape of violent reprisals. Parliament on the other hand continued to pass Measures authorizing the Government to detain without trial the arrested plough-men. In July, 1880, the untried prisoners were still detained in custody.

Meanwhile, the Armed Constabulary had been carrying a road through the Parihaka District. In May it was taken without warning through a fenced field held under cultivation by some of the natives. The fence was repaired by the Maoris, and for three weeks thereafter fences were being continually taken down by the Constabulary, and with singular imperturbability were being re-erected by the natives. At the end of July the fencers began to be arrested; but as soon as each party was drafted off another party was found with cheerful alacrity to take up the work. The patience and self-restraint of the Maoris compelled even the admiration, while it excited the annoyance, of the Authorities. By the end of August two hundred and sixteen arrests had been made in the two months, and fifty-nine Maoris were sentenced, under the Maori Prisoners'

Detention Act, to two years' imprisonment. In November, the Maori fencers began to substitute slip-rails for fences, and these the Government allowed to remain. In the March preceding, a Royal Commission, which had been investigating the native grievances, reported "that the Plains will never be occupied in peace until proper reserves are made and marked out upon the ground. . . . To do this is an imperative necessity." This Royal Commission, which consisted of Sir W. Fox and Sir F. D. Bell, persevered in its task; and in a final report recommended that, of the one hundred and twenty thousand acres enclosed between the Rivers Oeo and Waingongoro, twenty-five thousand acres should be reserved for the Maoris, and that of the one hundred and twenty-five thousand acres embraced by the Parihaka District, from twenty to twenty-five thousand acres should be similarly reserved. The reserves were accordingly laid off; and, to the dissatisfaction of the Maoris, the Crown retained the seaward side of Parihaka. Te Whiti maintained his inflexible attitude, which was from the first entirely one of almost passive resistance, while the patience of the Government was being rapidly exhausted.

A serious contributing cause to this was the resignation of the Native Minister, now the Hon. John Bryce, owing to reluctance on the part of his colleagues to sanction the arrest of the leading agitators. Matters were approaching a climax, when the Governor, Sir A. Gordon, left on a visit to Fiji. In his absence, the Acting-Governor, Chief Justice Prendergast, recalled Mr. Bryce to office, and issued a proclamation calling upon Te Whiti and his adherents to signify within fourteen days whether or not they would accept the proffered reserves, and intimating that in the event of non-assent they would be withdrawn, and their settlement broken up. In the interim Mr. Bryce assembled an armed force of some two thousand five hundred volunteers and Constabulary under Colonel Roberts, and held himself ready to march on Parihaka. The fortnight's grace expired without any sign from Te Whiti, and on the 5th of November Mr. Bryce marched with his forces to Parihaka, where, in the *marae*, or meeting-place, Te Whiti and his henchman, Tohu, were found seated in the midst of two thousand men, women and children, counselling peace and self-control. The leaders quietly allowed themselves to be arrested, and Te Whiti, as he was led away, emphasized his extraordinary forbearance by saying to his people: "Be of good heart and patient. This day's work is not my doing. It comes from the heart of the *Pakeha*. On my fall the *Pakeha* builds his work; but be you steadfast in all that is peaceful." Fifteen hundred men, women and children were taken into custody; the settlement was broken up, the *whares* (huts) were dismantled, and the native population for sixty miles round were deprived of their fire-arms. The charge against Te Whiti and Tohu was that of making use of seditious language, but at the Supreme Court, to the expressed surprise of Mr. Justice Gillies, the Crown Prosecutor entered a *nolle prosequi*, and Parliament passed a Bill authorizing the detention of the prisoners without trial. Te Whiti and Tohu were consequently retained until March, 1883, when they were deported back to Parihaka, and placed on their reserves. In the meantime, the Crown lands had been sold and settled, and since then, under the restraining influence of Te Whiti, the natives have given no trouble.

Little remains to add to this narrative. The situation is at present one of profound and settled repose; the Queen's Writ runs uninterruptedly through the length and breadth of the colony, and there is every assurance for the hope that native wars in



THE WAIRAKEI HOT SPRINGS AND THE TE HUKA FALLS.

New Zealand are at an end. In 1879, Rewi, the hero of Orakau, visited Auckland for the first time in twenty years, and was lionized by the citizens. Early in 1882, Tawhiao, the King, also visited Auckland, where all sorts of honours were lavished upon him. He subsequently visited England, and is now living quietly at his home on the Waikato. At the beginning of 1888, he held a meeting at Maungakawa, at the invitation of the Ngatihaua tribe, when the following lines of policy were affirmed:—"That the Maoris and *Pakehas* shall be as one people; obey the laws of the Queen, and respect them in every way as loyal subjects; and that every native acting contrary to the Queen's laws shall undergo the same punishment as the *Pakeha*; that all natives avoid intoxication and other abuses; that no objection be offered to the Native Lands Court selling or otherwise so long as it is done legally." With this declaration the long dispute between the two races, which had lasted from the very beginning of colonization, at last ceased.

When the term of office of Sir William Jervois came to an end he was succeeded by Lord Onslow. The British Government has been trying the experiment of substituting for professional governors young noblemen of promise, who are sent to the colonies to dispense vice-regal hospitalities, and at the same time to learn the art of governing. Lord Carrington was the first with whom the experiment was tried, and Lord Kintore, Lord Onslow and Lord Jersey have followed in his wake.

Towards the close of the year 1890, the hold of the Premier, Sir Harry Atkinson, on the country had visibly weakened. His health had failed, and he was not equal to the fatigue of leading the House. A general election left him in a small minority, and he resigned. Sir Harry Atkinson was able, before he relinquished the political leadership, to publish a financial statement showing that he had succeeded in establishing an equilibrium in the finances, and had left behind him a clear surplus. The achievement of this task was really the great work of his Administration, and it was made possible only by severe taxation, and still more severe retrenchment. He has been succeeded in the Premiership by Mr. Ballance, the leader of the Opposition, who has indicated a disposition to adopt a radical programme in politics, especially as regards the incidence of taxation.

As indicating the degree of development to which New Zealand has already attained, it may be mentioned that at the end of 1889 its population was six hundred and twenty thousand seven hundred and eighty souls; that its shipping inwards and outwards was one million one hundred and ninety-five thousand eight hundred and eighty-six tons; that its total trade inwards and outwards was fifteen million six hundred and thirty-six thousand three hundred and sixty-two pounds; that its export of domestic produce was valued at nine million and forty-two thousand and eight pounds; that it depastured fifteen million five hundred and three thousand two hundred and sixty-three sheep, eight hundred and ninety-five thousand four hundred and sixty-one head of cattle, and one hundred and eighty-seven thousand three hundred and eighty-two horses; that it had one million three hundred and eighty-six thousand two hundred and eighty-seven acres under crop; that its revenue was three million nine hundred and ninety-one thousand nine hundred and nineteen pounds; that the deposits in its banks were thirteen million seven hundred and eighty-six thousand and fifty-five pounds; and that it possessed four thousand eight hundred and seventy-four miles of telegraph, and one thousand nine hundred and twelve miles of railway.



A FLEET OF WHALERS IN THE BAY OF ISLANDS.

DESCRIPTIVE SKETCH OF NEW ZEALAND.

AUCKLAND.

NEW ZEALAND, from its insular position and long, narrow and irregular outline, possesses, in proportion to its area, a far more extensive coast-line than any other part of Australasia, measuring, as it does, upwards of three thousand miles. For similar reasons, coupled with the fact that the trend of the Islands is from south-east round to north-east, it embraces a considerable diversity of climatic conditions, products and resources, as indeed would be indicated by the mere statement that it runs for nearly one thousand miles through more than thirteen degrees of latitude. Its oceanic environment imparts a singular mildness and equability to the climate, tempering the subtropical warmth of the far North, and qualifying the winter cold of the extreme South. Within its area of one hundred and four thousand four hundred and three square miles nearly every variety of climate is to be found represented, the temperature being variable enough and sudden in its changes. Droughts are rare, and are never excessive; floods are seldom very serious. The colony comprises the North, South and Stewart Islands, the two former being separated by Cook Strait, and the latter by Foveaux Strait. It is bountifully endowed by Nature with most of those gifts which require only an adequate population to ensure national prosperity. Gold had been heard of in New Zealand from the time the territory was first made known to Europeans, although the discovery for practical purposes dates only from 1861. Copper also has been found, as well as certain quantities of silver, tin, iron, coal, oil, sulphur, marble, graphite and antimony, besides some small diamonds. In vegetable products New Zealand is exceedingly rich, and its soil will grow anything produced in Great Britain. There are, about one hundred and twenty varieties of indigenous forest trees, and about one hundred and thirty species of ferns. Of the flora of the Islands it is said that two-thirds of the species are peculiar to the group, while twenty-six of the *genera* are not to be met

with in any other place. The most valuable vegetable product is the kauri pine, furnishing timber and gum, which constitute the staple of a lucrative foreign trade. Possessing such advantages, and magnificently situated in the midst of the greatest expanse of ocean in the world, in the direct water-way between America and Australia, its future is assured, and it is not surprising that its people should be inspired with patriotic expectations, or that its public men should give rein to the imagination as they attempt to cast the horoscope of their country.

On entering the port of Auckland, the traveller recognizes at once that the panorama and the conditions under which it is presented are singularly prepossessing. The approach to Auckland Harbour is one of the noblest in the world, for the city lies on the south-western shore of the great Hauraki Gulf. The ship's course must necessarily be from the direction of the north, because the Gulf is flanked on the east by a long peninsula which forms its shore on that side. The Great and Little Barrier Islands lie just off the entrance to the north, and form there a partial breakwater, though they do not enclose the Harbour. The Gulf proper begins in the thirtieth parallel of latitude, between Cape Colville and Kawau Island, where it is about twenty-five miles wide. The course to Auckland lies south till vessels pick up on the right hand the Tiritiri Light-house, which stands on a small grassy islet, separated by a deep and safe channel from the Whangaparaoa Peninsula—a long jutting promontory, which runs out eastward from the land, and forms a north-westerly breakwater for the rest of the passage. The Great Barrier Island lies thirty-five miles in the rear, and its hazy outlines are just discernible over the ship's stern. Onwards from Tiritiri the navigation is in smooth water, the course is straight and broadly defined, there are no impediments or dangers to necessitate cautious navigation, and the vessel is steered steadily on towards the spacious Rangitoto Channel, which leads right into port. This channel lies between the Rangitoto Island and the main-land, which is in this part a low-lying peninsula stretching obliquely across the bow, and permitting the eye to see over it and catch glimpses of the distant city rising gradually from the water's edge, and disappearing over a ridge behind which isolated hills of volcanic action rear themselves at intervals.

Entering the Channel, Lake Takapuna, with its broad, shelly beach, its villas, orchards and gardens, lies to the right rear; and the hinder portion of the transmarine suburb of Devonport, with its curving shore, numerous trim white cottages and stores, its neat race-course and its picturesque Mount Victoria, belted with pine-trees and crowned by a signal-station, is on the right front. Away to the left, the Channel is flanked by the magnificent volcanic island of Rangitoto, with a substantial beacon of stone off the reef at its foot. Rising with an extensive sweep, it culminates at the centre in a triple-peaked volcanic mount, nine hundred and twenty feet high, symmetrical in its proportions, sharply clear in its contour, and sombre in its colouring. It is destitute of forest, but densely clad to its immediate base with undergrowth and native shrubs, of which about four hundred varieties are to be found on the Island. The scaling of the Mount is a far more formidable undertaking than its height would lead one to imagine, for the place is thickly overlaid with loosely piled blocks of *scoria*. Behind Rangitoto lies the grassy park-like island of Motutapu, stocked with sheep, cattle, winged game and herds of deer, and owning the undisputed sway of Messrs. Reid

Brothers. Its tempting little coves and retired bays are the favourite resort in summer-time of yachting parties which repair thither on Saturday afternoons to camp out over the Sunday.

Beyond Rangitoto and Motutapu, and trending right across the entrance to the Waitemata Harbour, lies an archipelago of islands which completely fills in the picture on that side—among them Motuihi, with its beautiful sandy beach and its quarantine building; and Waiheke, with its numerous indentations and diversified conformation of vale, hill and woodland; behind them all, the lofty summits of the Thames and Coromandel Ranges, faintly traceable in the lighter azure of the sky. With ample sea-room about us, we are yet encompassed by the land, for the southern shore sweeps behind the islands far remote from the vision, and inland the well-timbered Hunua Ranges close the prospect in that direction. The northern shore advances and ends in a rounded hill styled the North Head, under whose lee the vessel passes into port. The sides and summit of this headland are mined, trenched, counterscarped and embattled for defensive operations, and there are quarters for a permanent force of artillery-men. There is another Fort at Point Resolution, on the eastern flank of the city, while submarine mines are also laid down in the Harbour, and a torpedo-boat forms a part of the warlike equipment. Far out from the North Head lies the small Brown's Island (Motukorea) couched like a weasel, and straight in front is the Bean Rock Light-house, right in the fair-way of the Harbour, and commanding an uninterrupted view of the port and city. Auckland, from its unrivalled maritime position on the narrow isthmus overlooking both coasts, has been well-named the "Corinth of the South," and from its surpassing beauty the "Naples of New Zealand."

The view bursts suddenly upon the sight. With an almost imperceptible curve, the

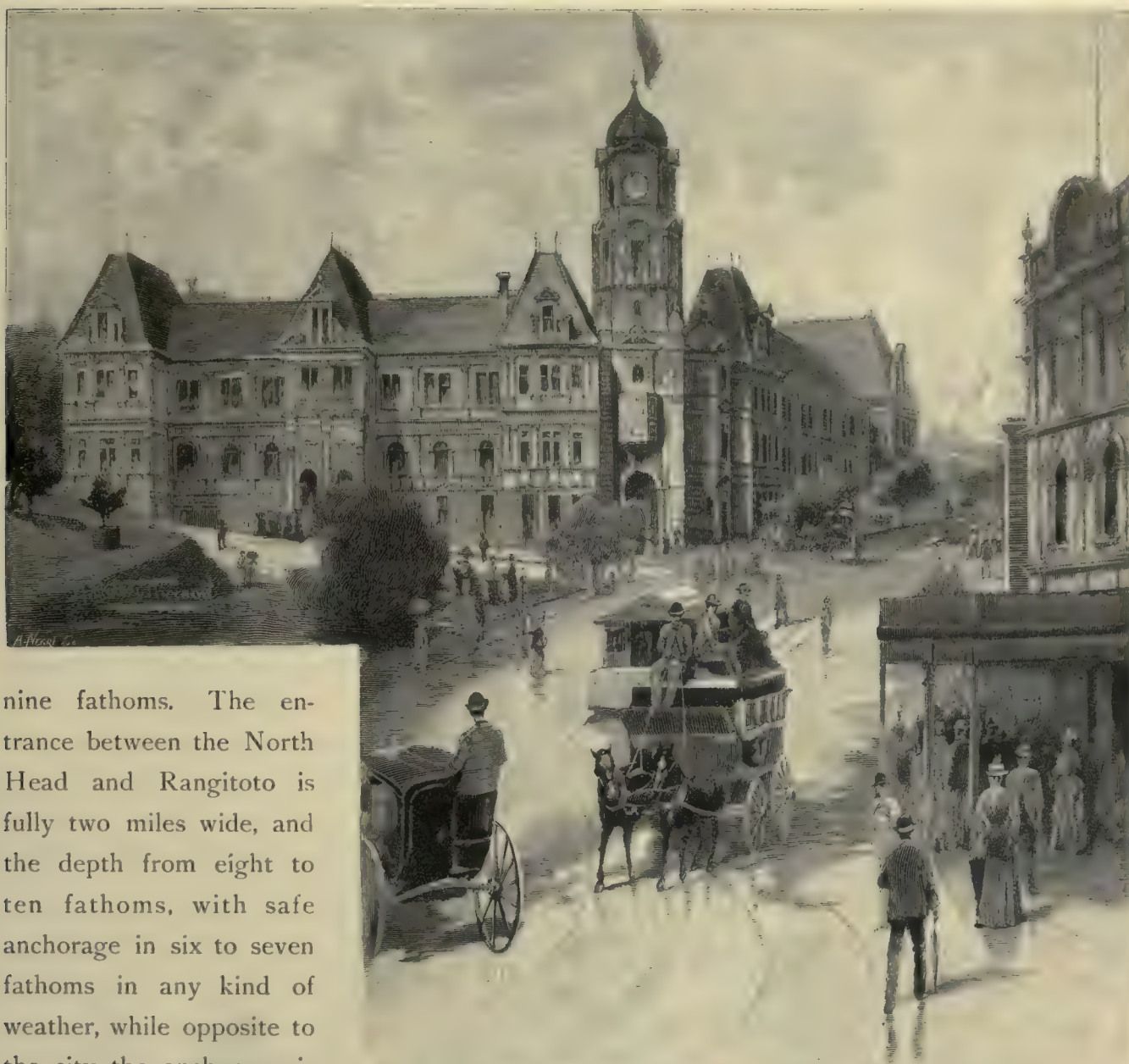


THE QUEEN STREET WHARF, AUCKLAND.

bosom of the Waitemata—"The Shining Water"—extends its generous width away to the point where the Titirangi and Waitakerei Ranges, westward of the city, bound the horizon. It opens out there into an expansive sheet, and then, sweeping round Kauri Point on the northern shore, it runs fifteen miles further to Riverhead. The southern shore, from the mouth of the Tamaki River to the foot of the ranges beyond the city, lies low, and advances and recedes in regular alternation, forming a close succession of pretty bays, around whose margin and gentle slopes, villas, embosomed amid trees, are springing up in great number. Just off Bean Rock lies St. Helier's Bay, with its broad expanse of beach, its hotel and temperance accommodation house, its long jetty and extensive avenue of trees.* Directly opposite is Kohimarama Bay and its Training School for neglected and destitute boys. A solitary sandstone cone, known as the Bastion Rock, stands off its nearest point. A little higher up the Harbour, the land retreats into Orakei Bay, which is sacred to the remnant of the Maori tribes that once densely peopled the isthmus, and the traces of whose *pahs* are still to be found in its volcanic hills. At Orakei resides the chief Paora (Paul) Tuhaere and his tribes-men, well-to-do, indolent, and thoroughly Anglicised in manners and in dress. Over the ridge from the Bay, distant only a short walk from the eastward, is an interesting relic of bygone times, when Auckland was in its swaddling clothes—the small stone Maori church of the Tamaki.

On the opposite shore of the Harbour lies the charming little borough of Devonport, with its couple of wharves, between which and the city a fleet of well-appointed ferry-steamers—constructed after the fashion of American river-boats—ply at half-hourly intervals from either side. Higher up is the Calliope Graving Dock, with men-o'-war anchored out in the stream not far from it, and vessels of every rig and from every clime lying motionless at their moorings in mid-channel, or berthed at the various wharves. Right in front sits the city, her feet in the sparkling water, her right arm formed by the curvature of Mechanics' Bay, half reclaimed from the sea, and her left arm bent round Freeman's Bay to the breezy plateau of Ponsonby on the west. Across the mouth of Freeman's Bay stretches a breastwork, and the inner area, like that of the other Bay, is in process of reclamation. Opposite the city on the northern side, the shore recedes for miles into the deep concavity of Shoal Bay. On its eastern side is the low peninsula across which is visible the first glimpse of Auckland from the sea. The further arm of the Bay ends in Stokes' Point, within whose shelter lies the Northcote Wharf, affording access to the suburb of the same name, rustivating amid its strawberry gardens and dairies. Hardly a mile beyond, the eye lights upon the borough of Birkenhead and its wharf, and more remote still is Chelsea, with the brick buildings and tall chimneys of the New Zealand Sugar Company's refinery, and its wharves in the foreground, and at their back the double line of trim cottages which climb in close order the slope of the hill. These are the comfortable homes of the Company's *employés*.

Auckland already ranks as one of the five or six leading cities of Australasia, and from present indications the chances are in favour of her soon disputing Adelaide's title to precedence. For capacity, combined with the utmost facility of entrance by night or day, the Port is without rival in these seas. Vessels of the largest size may fearlessly enter at any state of the tide. Off Tiritiri Light-house an anchorage is afforded of from twelve to sixteen fathoms, and thence to Rangitoto the depth is from eight to



THE AUCKLAND FREE LIBRARY AND ART GALLERY.

nine fathoms. The entrance between the North Head and Rangitoto is fully two miles wide, and the depth from eight to ten fathoms, with safe anchorage in six to seven fathoms in any kind of weather, while opposite to the city the anchorage is from seven to nine fathoms for a breadth of a mile and a half, and six miles further up the depth is

four fathoms. The least depth of the Harbour is thirty-six feet at dead low-water springs, to which may be added from ten to sixteen feet for rise and fall. The working ship-channel, with its average depth of thirty-six feet, varies in breadth from a *maximum* of two miles to a *minimum* of not less than a mile between the limits of the North Head at the immediate entrance and Kauri Point, where the Waitemata sweeps away to Riverhead. Of the quays the principal are the Queen Street Wharf and the Railway Wharf. The former, which lies to the side of the city, is the longest in the colony.

For a considerable distance outward from the fore-shore there is an extension of solid stone breakwater, with an outer projection and lateral tees powerfully built of wood. This wharf runs out sixteen hundred and eighty feet into the stream, the Railway Wharf being one thousand and fifty feet long. Beyond the Queen Street and Hobson Street Wharves lies a commodious graving-dock, which was solidly constructed of stone in 1878, measuring three hundred feet in length, forty-four feet across at the entrance,

and having a depth of thirteen feet at average spring-tides. But this is now devoted merely to the use of coasting vessels, for on February, 1888, his Excellency the Governor, assisted by Rear-Admiral Fairfax, opened on the northern side of the Harbour the Calliope Dock, which ranks as the largest in the colonies. Its dimensions are five hundred feet long, eighty feet wide at entrance, and thirty-three feet depth of water on the sill at high-water. It is provided with a temporary head, so that in case of necessity the Dock may be lengthened. Its capacity and solidity have been sufficiently tested by the fact that, on the day of opening, *H.M.S. Diamond* and *Calliope* were both received into it, and remained for several days. The next largest docks in Australasia are the Fitzroy Dock at Sydney, the Alfred Dock at Melbourne, and the dock at Lyttelton, which are four hundred and fifty feet long, and have much less depth of water on the sill. The Calliope Dock cost the Auckland Harbour Board one hundred and thirty-five thousand pounds for construction, and the machinery required for it will involve an outlay of twenty-six thousand pounds additional.

It is a fortunate thing for Auckland that its Harbour Board is the wealthiest corporation of the kind in New Zealand. With an endowment of fifteen miles of foreshore it has made extensive reclamations on the city-front, and derives a considerable revenue from leasehold rents, while its resources will develop with the growth of the place. Its handsome offices, three storeys high, and crowned with numerous small turrets, stand on reclaimed ground between the Queen Street Wharf and the smaller dock. Hard by is the Sailors' Home, erected in 1887 out of moneys bequeathed for the purpose by an old and wealthy resident of Auckland, named Mr. Edward Costley. This man, with his frugal habits and simple mode of life, amassed great wealth, which at his death he left to be divided among seven public institutions of his adopted home, viz., the Free Library, the Museum, the Sailors' Home, the Old People's Refuge, the Training School for Neglected Children, the Parnell Orphan Home and the Hospital. His estate, when realized, brought in a sum of twelve thousand seven hundred and fifty pounds for each of these schemes, and the bulk of the money has been invested for their benefit.

The Queen Street Wharf is the seaward extension of the main thoroughfare of the city. Although the conformation of the ground has undergone considerable alteration for the purposes of traffic, it is still evident from the slope of the lateral streets that Queen Street was originally the hollow between two hills. It has a straight run back from the water of upwards of half a mile, and then taking a slight bend to the westward, and increasing its gradient, it reaches the top of the ridge along which the Karangahape Road extends itself. It is a handsome street of shops, stores and hotels of varying height, of many architectural designs, and of durable material, brick with stucco being most used. In fact, Auckland may be said to have completed its transition from the wooden age, and to be well advanced in the age of brick. Within the building area of the city proper—and its limits have been enlarged—the City Council will not now permit the erection of wooden structures. The most striking and imposing edifices in Queen Street are the Palmerston Buildings, a four-storey pile at the entrance to the Wharf; the new offices of the Mutual Life Association of Australasia, built of yellowish stone and four storeys high;—the New Zealand Insurance Company's buildings, surmounted by a tower containing the town clock with large dials on three of its sides;



QUEEN STREET, AUCKLAND, LOOKING TOWARDS WIND-MILL HILL.

and the Victoria Arcade, which extends along the entire front between Fort and Shortland Streets, and comprises four storeys furnished with a patent lift. It is built of red brick, picked out artistically with white stone, and the style of architecture is a modernized Gothic. At the opposite corner of Shortland Street stands the head office of the South



THE OLD WIND-MILL.

British Insurance Company, crowned by the erect figure of "Britannia." On the other side of Queen Street, from the South British, is reared the head office of the Bank of New Zealand, solid, square and massive, as becomes a substantial monetary institution. A little beyond, on the opposite side of the street, stands the new office of the Mutual Life Assurance Society of Victoria, surmounted by its emblematic group of statuary. Three of the four corners which Victoria Street makes in intersecting Queen Street are occupied respectively by the Union Bank of Australia, whose office is built in the Grecian style with a row of columns in front; the City Hall; a three-storey building with shops abutting on the street frontage; and the extensive offices of the Australian Mutual Provident Society. Between this and the intersection of Queen Street and Wellesley Street one passes the Working Men's Club, the Auckland Savings' Bank, solidly built and with pilasters of polished granite; and McArthur and Co.'s extensive warehouse; while in Wellesley Street West stands the Opera House, with sitting accommodation for some two thousand two hundred and fifty persons. It extends to the corner of the next street, up the slope from Queen Street. Still higher up this slope the spacious four-storey brick and stucco edifice of the Young Men's Christian Association occupies a commanding corner site. It comprises a library, reading-rooms, lecture and social halls, a gymnasium, and quarters for the Young Women's Christian Association.

About fifty yards up Wellesley Street East, and with the Albert Park immediately at its back, stands the Free Library and Public Art Gallery, and Auckland enjoys the proud distinction of being the only large city of the colony which possesses such institutions. They form a handsome pile of buildings, crowned by a cupola carrying a flag-staff. The space is so ample that, pending the erection of the proposed Town Hall, the Corporation finds room here for its various departments and for the fortnightly meetings of the City Council, to which each of the six wards of the city return three members. Throughout the week—Sunday included—the Free Library is kept open for the benefit of all who may desire to consult its stores. Of especial value and abounding interest to the reading public is the very fine library, comprising many rare and curious books, which Sir George Grey has presented to the city. To him also it owes many objects of extrinsic interest, collected by him in his long career as a traveller and as a colonial official. To the Art Gallery—opened by Governor Jervois in 1888—he presented his own valuable collection of pictures, comprising some good works by the old masters. The Gallery is open to the public every week-day.

Other striking buildings out of Queen Street are Sargood, Ewen and Co.'s fine four-storey warehouse in Victoria Street, the General Post Office and Telegraph Office and Telephone Exchange in Shortland Street, with heads of royal and vice-regal personages and Maori chiefs sculptured out of freestone; and, higher up the same street, the offices of the *Auckland Star* and the *New Zealand Farmer*. In Prince's Street, on the top of the ridge just to the eastward of Queen Street, stand the Museum, the Masonic



THE ALBERT PARK, AUCKLAND.

Hall, the Northern Club and the Jewish Synagogue. The Museum is well furnished with natural curiosities, inclusive of a complete skeleton of the gigantic moa and a superb Maori canoe and a carved house, and round the sides on the ground-floor are ranged the various plaster-cast fac-similes of the most celebrated figures and groups of ancient sculpture. The Supreme Court is a capacious building with rather squat towers, and is situated in Waterloo Quadrant, about five minutes' walk farther to the eastward. Within a glass case above the judge's bench are the battle-torn colours of the Fifty-eighth Regiment, the first unfurled in the colony. They were presented by Major Bridge to the city of Auckland. Just across the road stands the substantial Presbyterian Church

of St. Andrew's, and about twenty yards nearer Queen Street is the Government House, a mansion of wood surrounded by park-like grounds where flourish the English oak, the American maple, the Australian blue-gum, the semi-tropical palm, and some of the most attractive trees of New Zealand. Behind it lies the Metropolitan Ground, wherein volunteer displays and foot-ball matches are not infrequently held. Alongside this reserve, and fronting Symonds Street, stands the Choral Hall, with its broad flight of stone steps and its colonnade.

Customs Street cuts Queen Street at right angles near the Wharf. Here are the head-quarters of the New Zealand Timber Company and the Auckland Timber Company, corporations which own saw-mills all over the province, and find constant employment for hundreds of men. There are other companies of the same kind in the place, but these are the largest, and one has but to make a cursory inspection of their establishments in order to comprehend how large a share the timber industry plays in the social and commercial economy of the city. In travelling through the province to the north of Auckland, and in the Coromandel Peninsula to the east of it, one is frequently brought face to face with the seats of this kauri pine industry. At Tairua, Whitianga, Whangaroa, Mangonui, Hokianga, and at various points on the Northern Wairoa, may be seen all the processes of felling the stately timber, deporting it thence by tram-way to the River, and then rafting the logs down to the mill. In Auckland an interesting hour or two may be spent in seeing how the timber is worked up into the different forms required for the market. A few yards farther on are the Public Salt-water and Fresh-water Baths. The water for the latter comes cool and refreshing from the practically inexhaustible Western Springs, which are situated some three miles farther afield. From this convenient source the Corporation supplies not only its own burgesses but also such of the neighbouring boroughs as may choose to pay for the water.

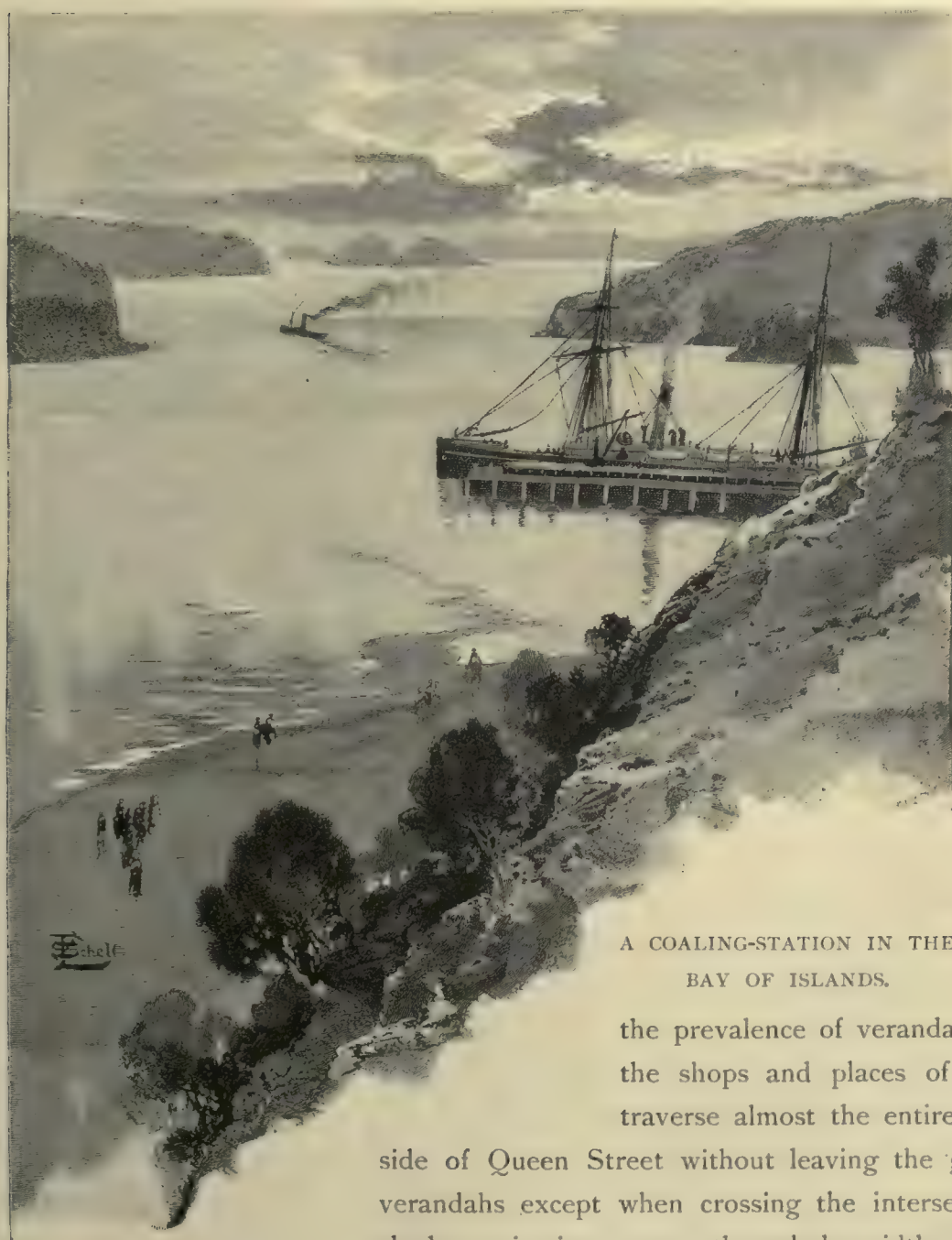
The means of locomotion are quite commensurate with the importance of the place. From the Wharf a tram-way line runs up Queen Street as far as Wellesley Street, where it diverges to the east and west, one link striking off to Newmarket and thence to the foot-ball arena at Epsom, within two or three miles of Onehunga, and the other passing through Newton to the farthest limit of Ponsonby. At present Epsom and Onehunga are connected by the Tram-way Company's services of omnibusses, but the extension of the tram-line to the latter township is in contemplation.

The street nomenclature is suggestive of a loyal and patriotic population. Running parallel with Queen Street on one side is Albert Street, and on the other side is Prince's Street, while Victoria Street is the chief intersecting thoroughfare. Vice-regal magnates are commemorated by Grey Street, Shortland Street, Hobson Street, Wynyard Street, Bowen Street and Jervois Road; while British historical characters give their names to Drake Street, Wyndham Street, Wellesley Street, Nelson Street, Wellington Street, Howe Street, Havelock Street, Curran Street, Grattan Street, Franklin Road, Pitt Street, Sheridan Street, Grafton Road and Napier Street.

Anthony Trollope remarks that Auckland is redolent of New Zealand. He is right, in saying that it is the most representative city of the colony. The Maori with his picturesque raiment of garish colours may still be seen peddling his fruit in its streets, although the intrusive *Pakeha* has almost entirely deprived him of the market which he

once had at his command. In Mechanics' Bay the hostelry still exists which a conciliatory Government provided for his accommodation when he chose to sojourn in the city. Even now, as of yore, the digging of kauri-gum—that peculiar product of North New Zealand—forms a never-failing means of making a good livelihood when other employment fails, and its value to the province may be gauged when it is stated that in 1887 no less than three hundred and eighty-five thousand pounds' worth was exported abroad.

A day's journey by rail or by water will still carry one into the forest primeval or into the haunts of the quondam owners of the soil; or will take him into that marvellous region of hot springs and geysers which one writer has not hesitated to pronounce as fit to be styled the first wonder of the world. There is one noticeable feature of a sub-tropical character than cannot well be overlooked—



A COALING-STATION IN THE
BAY OF ISLANDS.

the prevalence of verandahs in connection with the shops and places of business. One may traverse almost the entire length of the busier side of Queen Street without leaving the grateful shade of the verandahs except when crossing the intersecting streets. These shade projections cover the whole width of the footpaths.

Auckland does not lack public parks and other reserves for recreative purposes. First there is the Domain, covering one hundred and ninety acres of gently undulating land, and lying between the city proper on the east and the suburban borough of Parnell. One goodly division, enclosed with a separate fence, constitutes the Acclimatization Gardens. Another division is laid off, and has been prepared at great expense, for the purposes of cricket. It offers one of the best wickets to be obtained in the colony, and the slope of the ground on all sides of it, planted as it is with umbrageous trees, forms a natural amphitheatre from which thousands of spectators may watch the

progress of the game. The Albert Park is an elevated plateau of land, eleven acres in extent, in the very heart of the city; it occupies the site of the whilom Albert Barracks, and affords the most easily accessible view of harbour and city, the broad waters of the Waitemata gleaming in front of it, and on the other sides the net-work of streets, with a picturesque old wind-mill in the foreground. Sometimes, however, the band gives its performance in the Western Park, a pleasant tract of thirteen acres of ground planted with trees, chiefly *coniferae*, and situated on a sunny slope within the south-eastern confines of the Ponsonby Ward. In addition there are some half-dozen triangular miniature reserves, which are railed in and planted with trees.

At Ellerslie, about five miles out of the city, lies the property of the Auckland Racing Club, with its two grand-stands, its two totalisators, its saddling paddock and other appurtenances. The circuit of the racing track is one mile and a distance. The main grand-stand is a handsome edifice of two flats, built to accommodate five thousand persons, but with a sufficient capacity for eight thousand, and provided with flights of steps to a beautiful lawn equipped with comfortable lounges and rows of pot-plants. One thousand people can be accommodated in the second or Derby stand. The Club holds four meetings per annum, the chief events being the Auckland Cup and Derby during the Christmas and New Year holidays, and the Great Northern Steeple-chase which is run in midwinter. Here, likewise, the Pakuranga Hunt Club holds its annual race meeting in the spring of the year.

With churches and schools the district is amply supplied. Perhaps the most pretentious structure of all is St. Patrick's Roman Catholic Cathedral, which is built of brick and the omnipresent stucco. It occupies a commanding site near the fore-shore, and its shapely steeple, crowned with a brazen cross, is a conspicuous object from the Harbour. So too is the fashionable Anglican Church of the Holy Sepulchre, which overlooks the port from the elevated ground from which the city gently slopes to the water's edge. In Upper Queen Street stands a massive pile, known as the Baptist Tabernacle, whose pulpit was once regularly occupied by the Rev. Thomas Spurgeon. The head-quarters of the Anglican Church are situated in Parnell, where the Bishop resides. There also it carries on its own Grammar School and Orphanage. Its college for theological students is passed on the way to St. Helier's Bay. On the western flank of the city the Church of Rome owns a large estate upon which she finds accommodation for the Bishop, besides convent schools and an orphanage that afford scope for the talents and energies of the Sisters of Mercy. Other convent schools exist at Parnell and Onehunga, and the Marist Brothers provide instruction for the boys. The State on her part has made ample provision for the equipment of her youth. In the province of Auckland no less than two hundred and forty-eight schools have been established, and of these the city and suburbs of Auckland possess seventeen, the largest being the one known as the Wellesley Street School, which contains the names of one thousand pupils on its roll.

The District Hospital is a handsome pile of stone, built on a commanding site within a large reserve adjoining the Domain. The Lunatic Asylum and its auxiliary occupy a site, well planted with trees, some three miles westward of the city. They are under the direct control of the general Government, which keeps a resident medical man in charge. The Mount Eden Gaol is likewise a Government institution. It is a collec-

tion of rather unstable wooden buildings, surrounded by a massive stone wall, and is situated in the Grafton Ward. The convicts who are confined here are chiefly employed in breaking stone, extensive quarries of which, at the base of Mount Eden, lie all around the Gaol and its precincts.

The industries of Auckland comprehend numerous timber-mills, several foundries, boot factories, kauri-gum establishments, glass works, fibre works, potteries, frozen meat and butter works, soap, candle and oil works, a tobacco and cigar manufactory, coach and

carriage factories, wine and cordial manufactories, biscuit factories, flour-mills, breweries, bar and pig iron works, a sugar refinery, a cartridge factory and a woollen factory, the two latter industries being carried on at Onehunga. In addition there is a flourish-



RUSSELL.

ing ostrich farm in the Tamaki District. The field of journalism is occupied by one morning and one evening paper, in addition to which

there are five weeklies, and a number of other periodicals.

In dealing with the city, incidental reference has been more than once made to the suburbs and their institutions. Parnell, which is virtually the eastern part of the city, although it has its own borough council, is the oldest of all the suburbs, and for many years was the recognized abode of the fashionable part of the population. In this it has somewhat fallen from its high estate, and now presents rather the appearance of decayed gentility. Beyond Parnell lies the Borough of Newmarket, with its three breweries. From its Railway Station the Northern and Southern Lines diverge. Farther east still, we penetrate to the pretentious suburb of Remuera, with Mount Hobson on its southern flank, and the broad bosom of the Waitemata glittering at the extremity of a long slope beneath it. Between Newmarket and the south-western limits of the city, the pretty suburb of Mount Eden, so-called from its volcanic hill, extends itself amid trees and gardens. Mount Eden is one of the recognized "lions" of the place, and no visitor thinks of missing the opportunity to feast his eyes on the lovely prospect which it offers. More distant from the city than Mount Eden, stand in close company three rather squat volcanic hills styled the "Three Kings." They derive interest from the fact that they were the sites of prehistoric Maori *pahs*, and that the caves with which they abound were places of Maori sepulture. In fact, skulls are not infrequently found in them still. They are well worth a visit. The Waitakerei Ranges, lying to the westward of the city, are a popular holiday resort, for their forest recesses contain not only

a noble kauri forest, and a chain of small lakes, but also the beautiful Waitakerei and Nihotupu Water-falls.

Onehunga, six miles from Auckland, commands the western side of the isthmus, which in time will be cinctured by a canal linking together the Waitemata and the Manukau. It is a straggling little town, much frequented for its bracing westerly breezes and its salubrity. It possesses gas-works, two iron-works, in addition to a factory for the manufacture of bar-iron and wire from the Manukau iron-sand, a saw and planing mill, three tanneries, and the North New Zealand Woollen Factory. Auckland's trade with the west coast is carried on from this port, and steamers also ply to Waiuku. A substantial bridge spans the Manukau and connects Onehunga with the farming district of Mangere, where Te Wherowhero, the first Maori king, resided before he assumed the purple.

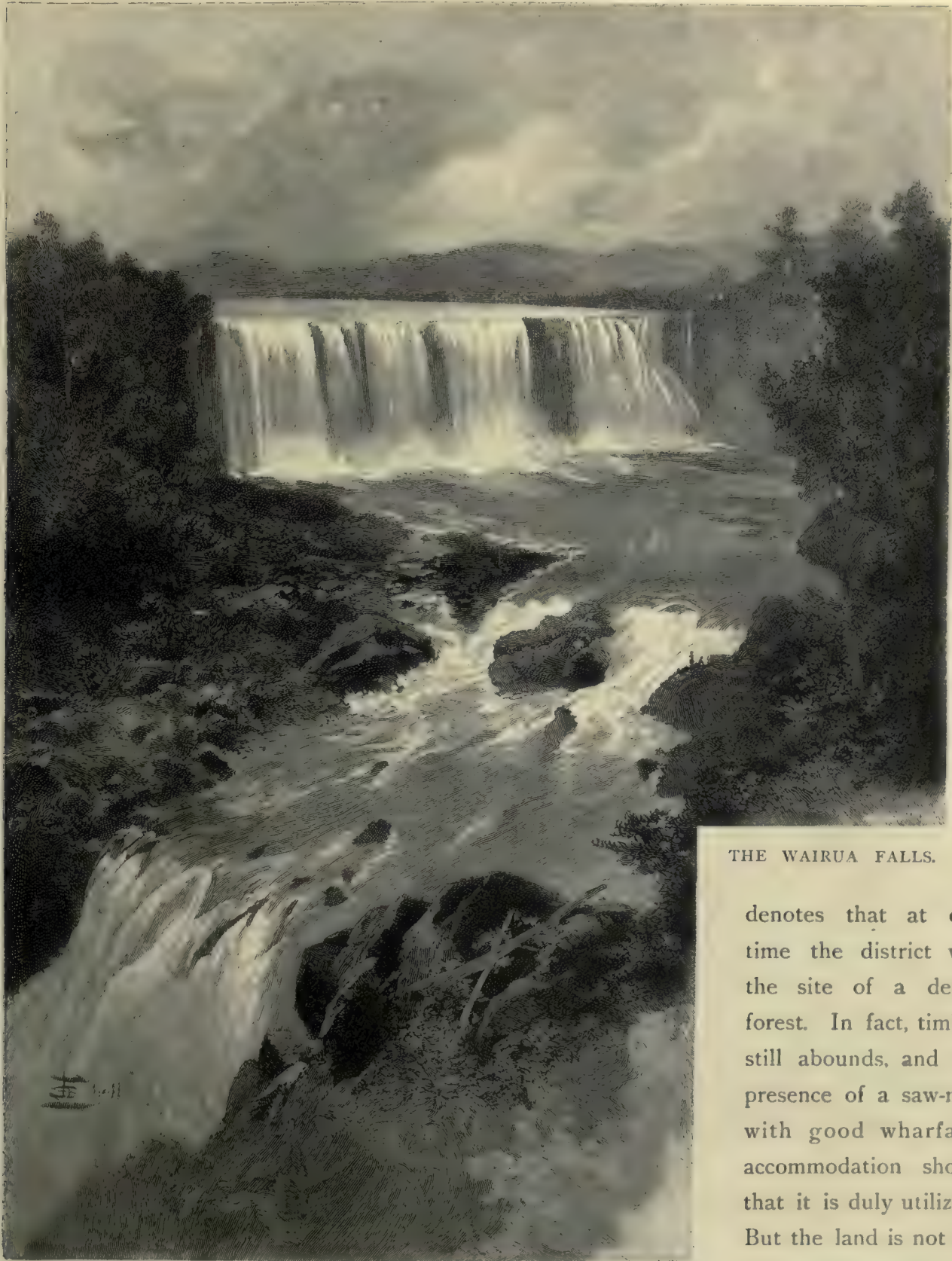
THE FAR NORTH.

The country north of Auckland may be most conveniently reached by taking passage in one of the Northern Steamship Company's fine vessels, which, leaving Auckland in the late afternoon, reaches early the following morning the expansive estuary of the Bay of Islands lying between Capes Wiwiki and Brett, eleven miles apart. So spacious is the entrance, and so deep is the water—so free from hidden dangers—that one may enter at will at any time and anchor close up to the lovely shores without risk of stranding. It is, in truth, one of the finest harbours in the world. For facility of entrance it equals Auckland; with its manifold natural charms it even transcends that beautiful haven; while for depth of water and perfect security even Port Nicholson must yield the palm.

The town of Russell, so called after Lord John of that ilk, has its places of worship, hotels and Custom House, its Lloyd's Agency, a United States Consulate—for American whalers still frequent its anchorage—its Post and Telegraph Offices and other Government establishments, its Town Hall, and a steam-service with Auckland. The signal-station immediately at its back is that on which Heke cut down the flag-staff with its symbol of British sovereignty. Kororareka—signifying "Sweet Penguin"—was a considerable place in those days. At times as many as one hundred and twenty whalers have lain together off its beach, and money was freely spent and little regarded there.

Laving the side of Russell is the Kawakawa River, and four miles from its mouth on the opposite bank is springing up the embryo town of Opua, where vessels of the largest tonnage proceed for coal. There is a regular ferry-service between Opua and Russell, and a line of railway extends from Opua to Kawakawa, eight miles farther up the River. The town of Kawakawa has been built at the coal-mines; its streets are regularly laid out, and its coal is in general request throughout the province. Manganeze mining is carried on opposite Opua, and the district likewise exports timber, kauri-gum, flax, oil, oysters, fish, etc. Still farther north is the harbour of Whangaroa, where Nature seems to have run riot in her effort to pile up rocky scenery in the most grotesque and fanciful forms. Passing through the contracted entrance, a splendid haven is soon entered. The township reclines immediately in front of us, and from its ship-building yards have been launched many of the fastest clippers among "the mosquito fleet" of Auckland and the South Pacific. Mangonui is the most

northerly township on the east coast, and it is reached by a few hours' steaming from Whangaroa. The land in the immediate vicinity of the settlement is generally of poor quality for pastoral or agricultural purposes, but its barrenness is compensated for by prolific deposits of kauri-gum—the crystallized exudation of the kauri pine—which



THE WAIRUA FALLS.

denotes that at one time the district was the site of a dense forest. In fact, timber still abounds, and the presence of a saw-mill with good wharfage accommodation shows that it is duly utilized. But the land is not all of inferior quality. A

glimpse at Oruru and the fertile Victoria Valley, with their smiling homesteads, will suffice to dispel any illusion of the kind. Mangonui—like Russell farther south, and Hokianga on the opposite coast—had its palmy days when whaling was almost the sole

pursuit of the white man in New Zealand waters. In that halcyon day, as many as thirty-seven whaling vessels have been counted in Mangonui Harbour at the one time, while a dozen more were cruising about in Doubtless Bay.

Fifty miles south of Russell, and within the deep recess of an ample estuary, lies Whangarei, the largest and one of the pleasantest towns north of Auckland. A line of railway carries passengers and their luggage right away from the wharf, two miles distant, to the township which is seated in the midst of a level tract of land dotted with orchards and gay with flowers, while the meandering Hoteo tempts the angler with its stores of fish. The district is rich in agricultural resources, rich too in its flocks and herds and its luscious fruit, but richer still in its mineral wealth. The Wairua Water-fall, in this neighbourhood, tumbles in a broad and smooth sheet, thirty-eight feet across, down a rocky face-work, a height of eighty-five feet, into a secluded and well-wooded valley. The famous limestone caves are situated about eight miles south of Mangapai. In the immediate vicinity of Whangarei is also the Puhipuhi Forest, covering some thirty thousand acres. It is reckoned to be the largest and most valuable forest of native timber in the province, abounding as it does with splendid specimens of the kauri. Unfortunately an extensive fire, which broke out early in 1888, laid in ruins about one-third of its entire extent, the loss sustained thereby being almost incalculable. No one thinks of visiting Whangarei without seeing its coal-mines at Whau-whau and Kamo, the latter place being also the site of a progressive township. Both of them are tapped by the railway. The valley of the Waipu, over twenty miles in circumference, and almost completely encircled by hills clothed with an abundant forest, lies between Marsden Point and the Waipu River, and is the abode of a vigorous and well-to-do body of Nova Scotian settlers, who arrived there in 1854, under the leadership of their minister, the Rev. Norman McLeod. In so far as the liquor traffic is concerned they are resolute prohibitionists, having successfully resisted every attempt to establish an hotel in their district, and their example is cited far and wide throughout the colony by the apostles of total abstinence. The tourists who visit Waipu generally explore its caves. A narrow defile leads into a natural amphitheatre clad in emerald green and encircled by lofty ranges of limestone formation, while the white boulders projecting through the sward suggest a resemblance to some vast immemorial cemetery. The principal cave is about three hundred yards in length, and the impressive drapery, the roof fretted with coruscating stalactites, and the marble-like pillars form a prospect the remembrance of which is not easily effaced. Myriads of glow-worms diffuse a pale lambent light which is quite in keeping with the strange surroundings. One chamber is one hundred and fifty feet in height, and the remotest cavity, from its echoing properties, has received the name of the "Concert Hall." A ride through the beautiful country extending by way of Maungaturoto and Wellsford to Warkworth in the Mahurangi District will afford the visitor a very favourable idea of the attractions of the North. From Warkworth he may take the steamer down the tranquil and picturesque River, past its hydraulic lime and cement works, to the sanatorium of Waiwera, which he will find crowded with people who have repaired thither from all parts of the colony and from Australia to bathe in its hot medicinal springs. A large and well-appointed hotel has been recently erected for their comfort. This place is only thirty-six miles from Auckland, which may be reached

without fatigue by steamer in two hours, or by coach by way of the Bohemian settlement of Puhoi and the lovely Orewa beach to Devonport.

The Northern Line of Railway from Auckland strikes across the Waitakerei Ranges, past disused gum-fields and through forests scarred with fire, to the town of Helensville, thirty-eight miles from Auckland. It is the *dépôt* for the Kaipara and Northern Wairoa trade, and will increase in importance as the line is extended northward. The town of Dargaville on the North Wairoa is one of the seats of the timber trade.

THE REGION OF GOLD.

A four hours' trip southwards by steamer down the island-studded Hauraki Gulf brings one to Grahamstown, the mining centre of the Thames gold-fields. It is built of wood on a narrow expanse of alluvial flat at the base of the ranges, on whose sides and within whose defiles the operations of quartz-reefing have been continuously carried on since the first "rush" in August, 1867. Like all mining townships, it is grimy with smoke. The distant roar of machinery is the predominant sound, and the appearance of drives, shafts, flumes, tram-ways and mining apparatus on every hand proclaims the calling of the



THE WAIORONGOMAI TRAM-WAY, TE AROHA.

bulk of the people. It is only a few minutes' walk to the sites of the celebrated mines, which brought in handsome dividends to the fortunate owners, and spread far and wide over the other colonies the fame of the Thames El Dorado. Within the compass of a limited extent of ground lie the "Shotover;" the "Caledonian," which, in its first year yielded the astounding product of ten tons of ore, valued at five hundred and seventy-two thousand pounds; the "Golden Crown," which paid its lucky

share-holders two hundred thousand pounds in dividends in the course of a twelvemonth; the "Kurunui," which gave a yield of twenty-five thousand pounds' worth of gold from the first week's crushing; the "Long Drive," "Queen of Beauty," "Moanataiara" and many others: the average yield all round from the Thames being an ounce and a quarter per ton. At present the "Cambria" is the most productive mine. In as many months it has paid twenty dividends of sixpence each. Although the Lower Thames gold-field is actually confined within an area of four miles long by two or three in breadth, the entire peninsula—eighty miles long by from twenty to thirty miles broad—is heavily charged with gold, silver and other minerals. The Thames touched the zenith of its prosperity in 1871, when the output of gold was three hundred and thirty thousand three hundred and twenty-six ounces, valued at one million one hundred and eighty-six thousand seven hundred and eight pounds. Since then the declension has kept pace with the gradual working out of the upper levels, but there will be a renewed and more permanent era of prosperity for the field when systematic operations are started upon the lower levels, which so far are practically intact. The Thames possesses the second largest pumping-engine in the colonies, its cylinder being eighty-two inches in diameter, length of stroke ten feet, and its lifting capacity ten tons per minute.

Coromandel is situated higher up the Thames Peninsula, and was the first gold-field discovered in the colony, but native troubles prevented it for many years from being properly opened up. The gold is finely disseminated through the stone, and is often found in combination with silver and other minerals. This, too, is the general characteristic of the highly mineralized ore obtained in the Upper Thames or Te Aroha District. There are three distinct routes for journeying thither. We may take the steamer or coach at Grahamstown, and voyage up the lovely Waihou River, or jolt over the undulating country of the Thames Valley. Or, if the train offer greater temptation, we may take it at Auckland, and without a single break hurry through the Waikato Valley to the alluvial expanse from which Te Aroha ("The Love") springs abruptly aloft for three thousand two hundred feet into the clear canopy of heaven. In any case, the journey will be of about the same duration, namely, six hours.

The township of Te Aroha is prettily situated in the contracted space between the Waihou and the base of the mountain. It is a sanatorium of considerable importance, for its domain contains no less than eighteen medicinal and therapeutic springs, the great majority of which are thermal. Their waters are all feebly alkaline, and strongly charged with carbonic acid gas, which is constantly escaping from them in large quantities. It was only in 1880 that the district was opened up to settlement and to mining enterprise, and the gold-mining operations are now centred at the township of Waiorongomai, three miles from Te Aroha. Here has been erected, at a cost of twenty thousand pounds, one of the largest crushing plants in the colony. It comprises forty stampers and twelve berdans. From this battery, a tram-way leads to the mines at the mouth of the creek, about one thousand five hundred feet above the sea-level, the principal one being the "New Find." The district is possessed of enormous mineral resources, but as the gold is of very fine quality, and the quartz containing it is likewise heavily charged with silver, galena, and other minerals, the process of extraction is costly, in default of some cheap and effective means—of the kind rapidly coming into use of late years—of

dealing with refractory ores. The processes tried so far have allowed too large a proportion of the gold to escape.

After leaving Te Aroha, the train bowls along a vast and fertile valley for three-quarters of an hour to Morrinsville, a few years ago the centre of the Piako Swamp, across which the traveller could find his sluggish way only by boat. Thanks to the energy of the Waikato Land Association, which spent upwards of one hundred thou-



GRAHAMSTOWN.

sand pounds in reclaiming its ninety thousand acres, it is now a rich plain dotted with cattle, homesteads, and plantations of trees. If the Association has not derived a sufficiently large return for its great outlay, the country

at any rate has reaped the benefit. The route to the Hot Lakes District diverges here from the Main Line, but for the present we hold on the way to Hamilton, a rising town of some pretensions, built upon both banks of the Waikato River, which is there spanned by two substantial bridges. A few miles beyond Hamilton, a branch line runs to Cambridge, its competitor for distinction as the premier township of the Waikato. It stands in the midst of a thriving agricultural country, and offers both river and lake scenery of much attractiveness. Returning to the trunk-line we continue our journey on through the Waikato Valley, past the well-watered and timbered district of Ohaupo,

rich in its beeves and flocks, to the splendid agricultural country of which the township of Te Awamutu is the centre.

THE WONDERLAND OF NEW ZEALAND.

The Wonderland of New Zealand is to be reached from Oxford. As the train flies over the broad acres of the Matamata Estate, there may be seen in the near distance the lofty extension of the range of Te Aroha, with a magnificent cascade in full view coursing down its escarped face, while in the immediate foreground the eye rests upon a long stretch of cultivation. The railway covers the one hundred and thirty-four miles that lie between Auckland and Oxford, where it is the custom to rest for the night. Starting from Oxford at seven o'clock, the coach-drive of thirty-four miles to Rotorua is compassed by noon, and on alighting we find ourselves in the very centre of those subterranean, hydro-thermal forces, whose sleepless activity, within a zone seventeen miles in breadth and one hundred miles in length, from the base of Tongariro to the sea-coast, has invested this unique district with everything that can amaze, bewilder, and impress the beholder. The balcony of "Lake House" commands an extensive view over the blue waters of Lake Rotorua, which is twenty-seven miles in circumference; and the native village of Ohinemutu at the base of a jutting peninsula is in the immediate foreground, half a mile from it is Sulphur Point, with its sanatorium, comprising hospital and baths, erected by the Government at a cost of twenty thousand pounds, and in the middle distance of the Lake is the island of Mokoia, to which, according to the poetic Maori legend, the beautiful maiden Hinemoa was wont to swim in order to keep tryst with her lover Tutanekai. First impressions are slightly alarming. A powerful smell of sulphur pervades the atmosphere, the surface of the ground feels too suggestively warm to the touch, and the eye is dismayed by the appearance of ebullient springs of clear water or of filthy mud on every hand. The feature of the village is its *whare-puni*, or carved meeting-house—an oblong span-roof shed, with its ridge-pole supported by one of those grotesque Maori images which are endlessly repeated in all the carved specimens of their pantheon—a disproportionately large and stolid head with lolling tongue and nacreous eyes, the body long and narrow, the arms bent with the elbows projecting at a sharp angle, the three-fingered hands folded on the stomach with an unmistakable suggestion of gastronomical satiety and delight, the thighs knobby and the feet misshapen. The arabesque scroll-work, which adorns the two massive slabs of wood that form the uprights on which rest the beams sloping from the ridge-pole, is far more sightly to look upon and to admire.

Although the therapeutic qualities of the thermal springs still retain their potency unimpaired, and the marvels of this weird region have been heightened and multiplied rather than diminished by the terrible eruption of the 10th of July, 1886, the Parian-like terraces with their cascades of limpid water, backed by a cascade of the most delicate and lovely lace-work, have disappeared for ever, and the waters of Lake Rotomahana, on the margin of which they were happily set, have given place to seething mounds of mud and roaring crater. The counterfeit presentment of what they were is preserved in the portfolios and views of local artists, and is stereotyped on the pages of countless books of travel, whose authors exhausted their powers of description in the



THE WHITE TERRACE IN A STATE OF ERUPTION.

effort to convey an impression of their strange and singular beauty. One writer says: "The dull, uninteresting aspect of the lake, and its scrubby vegetation, served rather to enhance than to detract from the magnificence of those splendid natural stair-cases. The White Terrace surpassed its sister in size and loveliness. At a distance it looked white as alabaster, but on nearer approach was seen not to be white, but tinged with a faint salmon or cream colour. Sometimes, when illuminated by the sunshine, it glittered with the varied colours of an opal, an effect, however, not attributable to the substance of the terrace itself, which was opaque, and so nearly white that a close inspection was required to detect the delicate flush over its surface, but arising from the action of



THE WHITE TERRACE.

light upon the water rippling downwards to the lake. In the crater, and the baths upon the lips of the terrace, this water was a lovely blue, and the crystals deposited in its passage formed themselves into regular groups, covering the whole surface with a fine lace-work. There was not an inch of it that had not in this way been chiselled, as it were, into graceful lines and curves which the natives, apt to seize upon resemblances, had appropriately compared to tattoo, from which the name of Te Tarata was derived. The terrace was fan-shaped, with the crater at the apex, and the full extension on the lake level; the stairs or buttresses were also of unequal height, varying from a few inches to twelve feet. The Pink Terrace has been formed like the White, but it was of smaller area, the surface smooth as enamel, and of a pronounced pink hue. The water in the crater was usually calm, just simmering and flowing gently over the rim. One might stand on the margin and look far down into its azure depths, a

spectacle matched only by the coral forest viewed in the shimmering of a placid sea. The baths on the terrace were shallow, but sensuously luxurious, imparting a peculiar smoothness to the skin, as though a fairy Madame Rachel had covered it with an exquisite varnish." The height of the White Terrace was one hundred feet; its frontage to the Lake measured about eight hundred feet; and the distance from the Lake to the centre of the crowning basin, or crater, also eight hundred feet, giving a superficies of silicated terracing of about seven and a half acres.

Reference to the lost glories of Rotomahana naturally carries the mind back to the incidents of the eruption. Rain set in on Tuesday night, on the 8th of June, 1886, and fell heavily throughout the Wednesday, when the weather cleared. Soon after one o'clock on the morning of Thursday, the 10th, the inhabitants were startled from their slumbers by shocks of earthquake occurring at frequent intervals and accompanied by a prolonged rumbling noise. The startled sleepers were aroused. They arose in alarm, dressed hurriedly, and left their dwellings in order to ascertain the cause of the strange disturbance. Before two o'clock their attention was concentrated upon a black and lowering cloud in a highly electrical condition, which seemed to be settling down over the truncated cone of the triple-peaked Mount Tarawera, immediately at the back of Lake Rotomahana. A few minutes later, flames—subsequently attributed to the glare of the incandescent rocks reflected upon the rising columns of steam—were seen above the Mountain, and within a quarter of an hour a terrific explosion rent its broad top open from end to end, with a convulsive tremor that was felt along the east coast from Tauranga to Gisborne. For the next hour the awe-struck and trembling watchers were witnesses of phenomena the fierce vigour and dread solemnity of which were enough to appall the heart of the stoutest. Forked lightning played continuously about the peaks of the Mountain and its inky canopy, from which also fiery balls darted hither and thither, flashing into broad ribbons of flame, or dropping in showers of huge sparks. Blood-red tongues, issuing from the darkness, lapped the face of the sky and vanished. Incandescent bombs rolled down the precipitous sides of Tarawera, the internal fires maintained their lurid glare, and to add to the striking horrors of the scene, earthquake shocks at ten-minute intervals formed the prelude to the fearful roaring of the volcano, which united with the crackling of the electric discharges to produce a vast, mixed, and indescribable noise.

At Auckland, distant one hundred and twenty miles in a direct line, and at the Bay of Islands, one hundred miles farther north, the people were aroused from their sleep by reports as of a war-vessel in distress, and they were heard also as far south as Nelson and Christchurch in the sister Island. More than that, the flashes of light were seen at Gisborne and Auckland, and the pungent gases which charged the atmosphere, and almost suffocated the denizens of the Lake District, were distinctly perceptible at Tauranga and Gisborne during the fall there of the volcanic dust. Meantime, how fared the hapless residents? While a bitterly cold wind was raging with the force of a tornado through the devoted district, uprooting great trees in the Tikitapu Bush, the native inhabitants were being overwhelmed in swift destruction. A tremendous eruption of *scoriae*, hot stones and liquid mud poured down upon the Maori settlements around the margin of Lake Rotomahana, and entombed both them and their inhabitants—Moura with its forty people and Te Ariki with its forty-five, while Te Wairoa suffered less

severely, only some ten or a dozen Maoris losing their lives. The two European hotels were wrecked, but all their terror-stricken inmates, save a young English tourist named Edwin Bainbridge, were fortunate enough to make good their escape. On the morning after the eruption the sun rose upon a scene of mournful desolation. The eighteen miles of country between Rotorua and Rotomahana (the prefix *Roto* signifying "lake") were covered with a bluish-gray mantle of thick adhesive volcanic mud, of an average depth of four inches, but deepening as one approached nearer and nearer to Tarawera. The sombre surface of this deposit was dotted over with the bodies of rats and mice, while homeless birds wheeled overhead in affrighted bewilderment; the pretty



THE PINK TERRACE.

little oasis of Tikitapu Bush lay stretched in devastation, the Blue Lake at its foot had been transformed into a sheet of dirty brown water, the Green Lake, "Rotokakahi," had sunk its beauties in repulsive turbidity; the *whare* roofs of Wairoa, peering above the solitude of *débris*, told their own mute tale of dire calamity; Moura and Te Ariki, with their scores of dead, were for ever swallowed up from human ken; the Terraces would no longer ravish the eye of the beholder, and the Rotomahana had suddenly become a misnomer—from a lake it had developed into a seething, steaming and raging chauldron of mud and slime. Tarawera, the silent and impassive, on whose broad head long generations of Maoris had with reverential awe deposited their dead, was enveloped in heavy masses of vapour, and when they gradually attenuated it was seen that an enormous

chasm, six hundred feet wide, and extending almost from base to summit, had been blown out of the end of the Mountain.

The indolent villagers of Ohinemutu escaped the severity of the eruption; a light deposit of volcanic mud, the outbreak of several new thermal springs, and an increase in volume and temperature of the old ones, being the only perceptible evidences of the dread visitation. If Rotomahana and its far-famed Terraces have disappeared there is still plenty to command wonder in the terrace formation at Whakarewarewa, with its chauldrons, fumaroles, sulphur pools and active geysers; in the marvels of the Paeroa Range, and Kakaramea with its hot river; in the terraces, caves and springs of Orakeikorako, the great geyser of the "Crow's Nest," the natural prodigies of Wairakei, and the numerous hot springs and falls of Taupo. Allusion to Whakarewarewa reminds the tourist of its pretensions to rank as one of the "lions" of the district.

It is an easy three-mile walk from Ohinemutu, and occupies the side of a hill which forms the right bank of the Puaranga Creek, presenting very much the appearance of an abandoned quarry, with muddy water filling up its various hollows. On the farther side of the narrow foot-bridge which affords access to the settlement, a native youth collects the toll levied by his chief, and this payment confers the freedom of the place. Threading the sulphur baths to the eminence on which stands the native village, there suddenly comes into view a boiling spring of clear blue water of great depth, which forms the village oven, and also the village lavatory, as the dusky and tattooed visages gleaming above its steaming surface sufficiently attest. If the shy and intermittent geyser of Waikiti is in full action, we may watch with delight the play of the lofty column of ebullient water, accompanied with a dull rumbling sound, betokening the activity of the forces which furnish the display. It is the centre of a series of mounds of sulphur and silica incrustations, and hard by it lie siliceous deposits in process of terrace formation, mud cones, sulphur wells, boiling springs and fumaroles. In fact the soil is seamed and thickly punctured by igneous action, and the odour of sulphur heavily impregnates the air.

The sanatorium at Sulphur Point will naturally form the head-quarters of the invalid, and possesses the greatest importance for him. According to Dr. Macgregor, Colonial Inspector of Hospitals, 'the marvellous resources of this place, if only they were properly advertised, and access by rail provided, would cause sufferers to congregate from all parts of the world in such numbers as would astonish the most sanguine believers in its future. I believe there is nothing in the world to compare with this as a city of refuge for persons who suffer from rheumatism, which has not gone to the length of organic changes in the joints; from neuralgias; from chronic congestions of such viscera as the uterus, liver and kidneys; from functional paralyses generally, and from skin diseases of all kinds.' The most famous baths are "The Priest's Bath," with its acidic and aluminous waters; "Madame Rachel's Bath," with its exquisitely soft saline waters, the silicates in which impart a lovely gloss to the skin; "The Blue Bath," a large reservoir provided with hot and cold water douches and showers; "The Laughing-gas Bath," with its fumes of sulphuretted hydrogen; and "The Pain-killer Bath," this last being one of the most valuable sulphurous springs which are to be found within the reserve.

In addition to the lakes which already have been referred to, there is quite a chain of others that are well worth visiting. Rotorua is separated only by a slender neck of low-lying land from its companion Rotoiti, and not far beyond it we may make acquaintance with Rotoehu, which has been compared to "a sapphire set in emeralds;" and the deep blue Lake Rotoma, shaped like a Maltese cross and bordered with densely-wooded



MAORI GIRLS BATHING AT WHAKAREWAREWA.

shores. Rotoehu, by the way, boasts a soda-water spring on its margin, and a Maori settlement named Taheke. A two-hours' walk through the forest from Rotoma brings the visitor to Lake Okatina, and the road thence leads, by way of a gully, to Lake Tarawera, in the immediate vicinity of which lies the lovely little Lake Okarika, in whose surroundings

and general aspect enthusiastic Scotsmen claim to see in miniature some of the characteristic features of Loch Katrine.

Before pushing on from Ohinemutu to Taupo, one with an eye for the picturesque will be tempted to traverse the forty-two miles of country which separates him from the sea-port of Tauranga. He will have the choice of two routes, of which the shorter, rougher, and more romantic, is that by way of the Oropi or Eighteen-mile Bush. For miles the road passes over hills and down dales, through passes and along precipitous gulches, and on under the outstretched arms of giant trees, whose trunks are hung with masses of swaying vines dangling like swinging halters from the rugged trunks. Ferns of infinite variety and artistic design please the eye with their green lace-like fronds, while through the forest the long-stemmed fern-trees lift their graceful rods and spread their round branchy tops of fluttering foliage like palm-trees in the tropics. In the midst of the bush, the coach follows a narrow winding road chiselled out of the face of a precipitous cliff, and on gaining its crest one may look back upon the Maungarewa Gorge, once a superb vista of craggy rocks overhung and embowered with the choicest foliage, and with the narrow stream at its foot spanned by a rustic bridge. But the glory has departed. The spoiler has been here, and has transformed this beauteous spot into a blackened and howling waste.

On emerging from the bush, the road gradually descends until it passes by the "Gate Pah," the scene of a memorable action, and thence winds its way through hills of fern for three miles until the town of Tauranga is reached, covering a small peninsula within the bosom of a land-locked harbour of the Bay of Plenty; and its principal street, "The Strand," skirts its stretch of beach. Outside the peninsula, a long narrow tongue of land curves round to the Bay, and terminates immediately in front of the town in a conical rock, eight hundred and sixty feet high, called Maunganui.

From Ohinemutu there is yet another very pleasant excursion to be made to the wonderful Wai-o-tapu Valley, which has only recently been opened up to the tourist. It is a twenty-mile journey, and lies between the Paeroa Range on the east and the ample expanse of the Kaingaroa Plain on the west, stretching from Lake Ngahewa to Ohako. Two lofty mountains—Maungaongaonga and Maungakakaramea—guard the northern entrance to the Valley, while all around this entrance steam-jets burst forth from numerous fumaroles, and an immense seething chaldron boils, hisses and groans with the noise of a steam-hammer. Maungakakaramea itself is wreathed from base to summit with steam, and its steep slopes are deeply fissured. From the top of Maungaongaonga a magnificent prospect is obtained of the extensive plain with its thirty-four lakes, and as far south as Lake Taupo, with the snow-clad peaks of Tongariro and Ruapehu clearly defined against the sky. "The Pink Chaldron" is the chief attraction of the Wai-o-tapu Valley. It is a deep depression on the south-eastern side of Maungaongaonga, coated with silicates of many hues, but with a predominance of pink. A spring of boiling water occupies one corner of the basin; and, on the upper side, three geysers rise one above the other, forming a terrace, which, it is hoped, will reproduce in the course of time many if not all of the marvellous beauties of those which have disappeared from Rotomahana. The clear blue water flows over lovely incrustations of white and pink silica, the slope being covered with thousands of tiny cup-like depressions. A

sulphur lake of brilliant yellow lies at the base of the terrace, and the water from it, after skirting the base, tumbles over a precipice, thus forming the Primrose Falls. Near the chaldron lies a foliage-lined lakelet which is strongly impregnated with alum, and one hundred yards distant from the lake is a mud volcano with a crater, twelve feet high and some ninety feet in circumference, from which a bluish mud is ejected in copious



THE GEYSERS, WHAKAREWAREWA.

quantity. The Valley contains also a large steaming lake resting on a basin of milk-white silica; the Rotowherowhero or Green Lake, with numbers of wild ducks sailing over its emerald waters;

the boiling Blue Lake; and the "Sulphur Terrace" and "Cave," the last-named enriched with pendulous stalactites of pure sulphur.

There are two routes over the fifty miles of country extending from Rotorua to Wairakei in the Taupo District, and each of these lies through a stretch of pleasant country presenting its own attractions. One leads, by a narrow bridle-track past Whakarewarewa, through the Hemo Gorge, and over grassy plains, to Orakeikorako, twenty

miles down the Waikato River from Taupo. After leaving the Gorge the mountain mass of Hapurangi, swelling like a dome from the plain, dominates the prospect until one comes within view of the colossal Mount Horohoro, rising like a gigantic wall to a height of two thousand four hundred feet above the sea-level, with a dense forest at its base, and beyond that on all sides a broad plain of pumice. Far away to the south-east lie the Paeroa Mountains, quaking with internal fires, and penetrated by boiling mud pools and hot springs. Ten miles below Orakeikorako, the Waikato River forms itself into a long and rapid reach, having a breadth of two or three chains. At Orakeikorako, both sides of the River are studded with innumerable steam-jets and hot springs (Hochstetter counted seventy-six of the former) while the banks are fringed with thick clustering masses of pure white silica. The place and its Maori settlement derive their name from a great geyser of intermittent action, which, while in play, throws off a column of boiling water to a height of fifty feet. A broad terrace of silica in process of disintegration carries a path which leads to the "Alum Cave," which is more properly a hole from thirty to forty feet deep, whose walls and loose boulders are coated with an inflorescence of alum. The other route lies to the westward, and is that traversed by the coach, but its features are decidedly inferior in point of interest.

After a journey of about thirty miles we reach Ateamuri, where the Waikato winds through a rocky valley margined by steep mountains; while, at the bridge, the River thunders over enormous rocks and boulders. Here a tremendous pinnacle of rock called Pohaturoa rears its curious form to a height of four hundred feet and overlooks the mass of huge boulders that lie scattered about its base. Thence, we mount to the central table-land of Taupo, with its desolate plains covered with snow-white pumice. Wairakei, or the "Valley of Geysers," six miles from Taupo, is certainly one of the marvels of the world. Its precipitous sides, from sixty to one hundred feet in height, are beautifully clad with trees, ferns and mosses of diversified hues, while down its centre flows the hot stream known as Te Wairakei, replete with thermal phenomena. Clouds of vapour ascend on every hand, and the insecurity of the soil renders it necessary to pick one's steps with due caution. The stream, fed by the hot springs on its banks, opens out into a charming blue lakelet, at a little distance above which heavy thuds, followed by reverberations that shake the ground, would almost persuade the visitor that he stands over the site of some vast internal forge. This is "The Steam Hammer."

On the southern bank of the stream, we pass in review the various geysers: Terekereke, a dark cavern with a rocky bridge; Tuhuatahi, a huge boiling chaldron with a circular basin about fifty feet in diameter, whose clear waters are in constant effervescence; the Great and Little Wairakei; and "The Heron's Nest," a geyser cone of incrustated sticks, with an intermittent fountain and surrounded by numerous fumaroles. Crossing to the northern bank near the location of "The Steam Hammer," we pass the "Petrifying Geyser," a curious spring whose waters invest every substance that they meet with a beautiful incrustation suggestive of nothing so much as red coral; the "Terraces," fit theme for painter or poet; Nga Mahanga, or "The Twins," a large pear-shaped basin, twenty-four by twelve feet, with its lip festooned by pendant masses of sponge, and divided into two parts by a band of sinter—a fountain plays at five-minute intervals;

"The Prince of Wales's Feathers," an intermittent fountain which throws its aqueous plumes to a height of twenty-five feet, and to a distance of fifty feet on either side; Korowhiti, or "The Whistler," a small water-spout which issues from a fissure of black rock with the sound of a whistle; "The Boilers," an ebullient rock-bound pool, seized with irregular spasms which expend their energy in the propulsion of a column of water to a height of six or eight feet; "The Funnel," a triangular fissure in the rock continually spouting steam, and occasionally geysers as well; "The Eagle's Nest," a symmetrical geyser-cone built up of long sticks like an eagle's eyrie and cemented with snow-white sinter, from



MOUNT TARAWERA AFTER THE ERUPTION.

whose midst a feathery geyser plays intermittently; the "Old Terrace," a paved plateau partially overgrown and decomposed; a congeries of white and gray mud volcanoes, some steaming and others seething; the "White Springs," two

large basins and a small lake of boiling milk-like water holding white-clay in solution; "The Donkey Engine," a small mound busily puffing steam with a regular pulsation; the "Red Terrace Cascade," a parti-coloured terrace about fifteen feet wide, over which the waters from a neighbouring geyser ripple and leap in charming little cascades; the "Black Geyser," a circular black basin, eight feet in diameter, filled with clear hot water from an intermittent geyser, and its bottom heaped with smooth black stones; Piroriori, or the Blue Lake, a long lake with steep banks and of ovoid form, its name derived from the pale-blue hue of the water imparted by the clay which it holds in solution; Te Kiriohine kai, or

"The New Skin," a hot greenish-blue stream of wonderful curative properties flowing out of the Lake, and forming in its course "The Water-fall," "The Fountain" and "The Cascade" baths; "The Sulphur Springs," active *solfataras* with deposits of pure sulphur; Okurawai, or "The Coloured Springs," a group of about a hundred boiling springs, some ejecting spouts of water or clay, and all glowing with vivid colours—red, pink, orange, yellow, cream, gray and white, which dazzle and coruscate in the sunlight with brilliant effect; and finally, Karapiti, or "The Great Steam-hole," the largest fumarole in the Hot Lake



A NATIVE "WHARE" BURIED BY THE ERUPTION.

country, visible for fifty miles, and with a force so terrific that branches of trees thrown into its screeching funnel are at once hurled forth again with tremendous velocity. This enumeration requires to be supplemented with a brief description of the Great Wairakei Geyser. Its crater is a deep, triangular cavity, some twenty feet wide at the top, yawning beneath a perpendicular cliff of black rock, and with its pool fringed by white incrustations of silica pointed and fretted like a delicate fabric of lace, while gleaming in the clear depths of the water lie masses of silicated rock in strange coralline forms and displaying lovely hues of pink, yellow and white. A large incrustated rock shaped like an arm-chair

constitutes the apex of the triangle, and at its foot the gurgling water finds an outlet. The geyser, like its lesser companions, is intermittent; the water, varying at intervals from five to fifteen minutes, becoming violently agitated, and then rising rapidly into a shooting column from four to fifteen feet in height, sometimes attaining even a height of forty feet. The eruption usually lasts about a couple of minutes, and the water then as suddenly subsides. Twenty feet to the west lies the Little Wairakei, a boiling pool, with small fretted white terraces. The rich mass of vegetation with which the Wairakei Valley abounds forms one of its loveliest features, and from an artistic point of view gives it a certain amount of pre-eminence over similar scenery in the Rotorua District.

Half-way between Wairakei and Taupo, and only three miles from the latter, we come in sight of the Huka ("Foam") Falls, which invest this part of the Waikato River with commanding interest. Local tradition has been busy with this wild spot, and old-time stories make the scene romantic with associations. One such legend affirms that a party of some seventy Wanganui Maoris once in a spirit of bravado dared to shoot the Falls, and that their canoe was engulfed the moment it reached the foaming gorge, one chief only, who leaped on to a boulder as the rapids were entered, escaping to bear home the melancholy tidings. Lake Taupo, called also by the natives Te Moana, or "The Sea," is of an irregular oval shape, twenty-four miles across from north-east to south-west, fourteen miles broad from east to west, and with a superficial area of over three hundred square miles. It is nearly one thousand two hundred feet

above sea-level, and the air is clear, dry and bracing. The lacustrine scenery is not particularly prepossessing or impressive. Low shores marked by few indentations or rocky promontories, a singular poverty of foliage, and one island only on Taupo's broad and shimmering bosom, are its distinguishing features; and these are hardly sufficient



THE FERNS OF NEW ZEALAND.

to endow it with any great beauty. Still, on a cloudless day, the prospect to the southward has powerful attractions in the graceful cone of Tongariro with its fleecy canopy of steam, and with the huge bulk of Ruapehu still farther in the background, dwarfing all its neighbour peaks. The village of Taupo, or Tapu-wae-haruru, "The Place of Sounding Footsteps," so called from the hollow cavernous sound of one's feet on the pumice plain, is situated on a flat directly overlooking the northern shore of the Lake, and some thirty or forty feet above it.

The visitor may notice that the water near the shore, a mile or so to the left, is steaming for some distance, denoting the presence of subaqueous boiling springs, and this phenomenon will prepare him for others of a like kind in the locality. On the

farther bank nestles a small Maori settlement. In fact, the shores of the Lake are studded with such settlements and with the remains of antique *pahs*, for Taupo was once the centre of a very numerous aboriginal population. * The verdant crest of Tauhara, an isolated wooded mountain standing about four miles from the township, attracts the eye of the traveller, forming one of those picturesque *morceaux* that the painter would not willingly omit from his canvas. From a cliff, overhanging a picturesque gorge through which the Waikato flows, about a mile from the township, may be seen a number of columns of steam issuing from springs on the right-hand bank. As the eye rests carelessly upon them, there suddenly bursts from a funnel of silica, looking for all the world like a large nest built of loose sticks, a pillar of hot water shooting boldly up into the air to a height of perhaps fifty feet or so, describing a beautiful curve, and descending in foam. This is known as "The Crow's Nest." Hard by it, there is a circular cavity in the high river-bank, its sides covered with incrustations of red, crimson, green, orange, yellow, black and brown; and, at its bottom, is a boiling pool of blue water throwing off clouds of dense steam. This is "The Witch's Chauldron." On the top of the bank, and one hundred yards from the River, in the midst of a clump of *manuka* scrub, lies "Big Ben," an aperture some fifteen feet deep, at the bottom of which the mud is boiling to the accompaniment of a dull throbbing noise, like the beat of a steamer's screw.

From this spot it is only a short walk to Glen Loffley, with its douche, plunge, swimming and vapour baths. A track extending along the north-eastern side of Tauhara leads up to Rotokawa, or the Bitter Lake, eight miles distant. It measures a mile long by three-quarters of a mile broad, and its waters have a nauseous sweet-acid taste. Fine slabs of sulphur glittering with crystals may be dug anywhere beyond the Lake. At the extreme south-western end of Taupo, within the recess of a pretty bay, lies ensconced the native settlement of Tokaano in the midst of hot alkaline springs giving forth volumes of steam. There is also a chalybeate spring of one hundred and fifty-six degrees Fahrenheit, which deposits large quantities of iron ochre. Some five hundred feet above the Lake, on the sides of the Kakaramaea Mountain, hot steam and boiling water are pouring out from clefts and fissures with a continual fizzing noise. In fact, as one writer has aptly remarked, this side of the Mountain seems to have been boiled soft, and to be on the point of falling in. It was here that in 1846 an avalanche of mud overwhelmed a native village, and buried alive the powerful chief Te Heu Heu and his harem of wives, together with upwards of sixty of his devoted followers. Hochstetter says: "I believe if anyone at Tokaano or on the declivity of the Kakaramaea would endeavour to count the several spots which give out either hot water, steam, or boiling mud, he would find more than five hundred of them."

At Tokaano we are almost upon the thirty-ninth parallel of latitude, which separates the province of Auckland from the provinces of Hawke's Bay and Wellington. The distance to Napier, on the east coast, is about one hundred miles, and some practical conception of the advantage of railway travelling is obtained from a consideration of the fact that the coach-journey will take two days. The Napier coach leaves Taupo at seven o'clock in the morning, and the route strikes away to the south-eastward across the Kaimanawa Range and the Rangitaiki River to Runanga. For the first twenty-four

miles the journey is tame and uninteresting, a dreary monotony of pumice and tussock-grass. At Runanga, however, there comes a sudden and welcome change in the land-



THE FLOWERS OF NEW ZEALAND.

scape, for the road here approaches the pretty Waipunga River, hurrying musically along its course from the mountains; and, by following its charming sinuosities, the traveller is intro-

duced to forest scenery in a country of rolling undulations, the vegetation being profuse and diversified. By six o'clock the coach rumbles into the small secluded hamlet of Tarawera, whence the Turanga-kuma Range is scaled by a winding zig-zag road, which twists and contorts itself in every possible form as it works its way up the steep and lofty acclivity, and at the same time calls for the display of a keen eye, a cool head, and a steady nerve on the part of the driver, for in some places a foot or so of ground is the measure of distance between security and certain death. It would seem as if the forces which are responsible for the elevation of this Range had expended themselves in tearing and rending it into all sorts of grotesque and whimsical shapes, and the eye of the traveller therefore has plenty of material upon which to fasten. The prospect is certainly highly attractive and full of varying interest. Having at last gained the crest of Turanga-kuma, the coach dashes through the native settlement of Te Harato, and begins the descent into the valley of the Mohaka, crossing that picturesque River by a bridge near a charming water-fall, and catching also a glimpse of the old Armed Constabulary block-houses, relics of more unsettled times.

The Titikura Range, rising to a height of two thousand seven hundred and fifty feet above the sea, lies immediately in front, and up its steep gradients and formidable slopes the horses toil patiently and slowly. At last the summit is gained, and an extensive panorama meets the gaze, but it is hardly so fine as that obtained from the height of Turanga-kuma. At a distance of fourteen miles from Napier, the road dips into the shallow bed of the Esk, and for the next few miles the traveller wonders whether the River is ever to be shaken off the course of the road, for in the strangest way it reappears again and again, until the mind loses count of the number of times the coach crosses it. As a matter of fact, it is crossed on no less than forty-five occasions, but at last the Petane Valley is entered, and a good carriage-drive is struck which leads into Napier by way of the thriving township of Meanee, and is environed by fertile tracts of grazing-land. Hawke's Bay is, *par excellence*, a pastoral province; and, although it possesses also very valuable forests of good timber, pastoral pursuits predominate, and wool and live stock are the staple products.

The busy and progressive town of Napier is prettily situated on Scinde Island, which may have been at one time surrounded by water, but is now a peninsula terminating to the north in a group of hills lying closely together. On the flat land at their base lies the business portion of the place. The streets containing the shops, warehouses, banks, hotels, churches, and Government and other buildings, are irregularly laid out, while the villas of opulent merchants lie embosomed amid trees and trim lawns on the salubrious sides of the hills. The town follows the flowing and semicircular curve of the ocean beach, which has not inaptly been compared, in its general aspect, to the Bay of Naples, although the landscape lacks the charming features of the celebrated Tyrrhenian Sea. The port retains its pretty Maori name of Ahuriri, and is slightly beyond the town proper. Its roadstead is exposed during easterly gales, but costly works are in progress for the improvement of the entrance, and the anchorage is good. The northern extension of Scinde Island is connected by a bridge with "The Spit" running south from Petane, and within this enclosure lies the inner harbour, which is, unfortunately, not available for harbour purposes. It is at "The Spit" that passengers are

landed, and where all the shipping traffic takes place. The road from "The Spit" slopes upward in a long incline which has been carried through steep embankments, overrun and rendered highly attractive to the eye by a profuse growth of ice-plants glowing with varied hues. These embankments slope again on their farther side into deep vales



THE TOWN OF
NAPIER.

well planted with trees, while church buildings crown one of the heights.

From this point the road descends right into the heart of the town, opening up to the view, ere we reach it, a fine prospect of the expanse of ocean merging at the horizon into the soft blue of the sky. As the traveller wanders through the streets and notes their names, every thoroughfare calls to mind one or other of the master-minds of English literature—Milton

Road, Shakespeare Road, Chaucer Road, Tennyson Street, Browning Street, Carlyle Street, Dickens Street, and so on. These names were given by Mr. Alfred Domett (the author of "Ranolf and Amohia"), who laid off the city in 1855. Napier is what the Americans would call "a live town," and it possesses all the requirements and conveniences of urban life. It is the head-quarters of the Bishop of Waiapu, in which connection it may be mentioned that a fine cathedral is in course of erection. The buildings are mostly of wood, and the process of architectural evolution has not yet advanced far enough to justify the people in aiming at much display. A capital

view of the town and its environs is obtained from Prospect Hill, whereon stands the light-house, and another excellent panorama may be had from the elevated ground which forms the site of the Hospital.

Clyde, on the river Wiaroa, forty miles by sea from Napier, is the only provincial township of any note north of Napier. It is the *dépôt* for a hilly grazing country, and hop-growing is also carried on in its vicinity. Thence it is not far to Gisborne, the second largest and the most southerly town of the province of Auckland. A second township has also sprung up about two miles off, known as New Gisborne, with a population of two hundred persons. In Gisborne proper there are branches of the Commercial and Federal Banks, a mechanics' institute with a well-furnished library of upwards of twelve hundred volumes, a public hall, and State and Roman Catholic schools. The country lying around Gisborne is of a fertile character, some of it heavily timbered and the rest devoted to agricultural and pastoral pursuits. Gisborne is the port of entry for Poverty Bay. Considerable attention has been given to harbour construction and improvement, and the anchorage and landing are both good. The town is built upon a wide stretch of level land at the mouth of the river Turanganui, and in some of its characteristics it resembles Napier. The neighbourhood of this town is historic ground, for here is the spot where Captain Cook first landed in New Zealand, in October, 1769. The Bay proper is subdivided into several inlets by three small rivers, the Turanganui, the Koputetea and the Werowero, and of these the first-named is celebrated as being the scene of Cook's landing, while the south-west point of the Bay was the first land sighted by the explorers in New Zealand. It was owing to the unfavorable circumstances under which he landed here, and the unsuccessful attempts of his ships' crews to obtain provisions, that Captain Cook gave his first port of refuge the somewhat invidious appellation of Poverty Bay.

In the Cemetery of the town there is to be found another historic feature, in the shape of a memorial monument to the victims of Te Kooti's massacre in November, 1868. As will be seen from what has been said of the evidences of progress, the people of Gisborne are active and enterprising in proportion to their numbers, and it is a town of which it may be said that the future depends less on the inhabitants than on the operation of circumstances which are beyond the reach of their influence. Every trace of the old days has so far disappeared that it is impossible to associate Gisborne in the mind with the historic scene of the Maori outrage of over twenty years ago. Events have moved on rapidly since then, and this town has moved with them. It is yet to be tapped by a line of railway, which will, doubtless, add largely to its importance when it comes. Meantime, it is a regular stopping-place for the large steamers which ply along the east coast, and consequently it has communication about thrice weekly with Auckland and Napier. There are two dairy factories in existence, honey and fruit are largely produced, and two or three companies have been formed for the purpose of working the considerable deposits of petroleum which exist in the district.

Returning to Napier, the traveller may pass by train right through the province of Woodville in the vicinity of the celebrated Manawatu Gorge, a journey of ninety-five miles. It is a splendid tract of land, dotted over with thriving townships, rich in highly-cultivated farms, and teeming with sheep, cattle and horses. The route lies through

Hastings, with its plantations of trees, its churches and comfortable homesteads, and its flocks of long-woolled sheep; Te Aute, with its native school; Kaikora, on a plain divided into numerous farms and backed by undulating downs; Waipawa, with its growing township and affluence of *kahikatea* timber; Waipukurau, the picture of content and plenty; and Takapau, nestling amid groves of picturesque cabbage-trees, and with



THROUGH THE SEVENTY-MILE BUSH.

the Rautaniwha Plains stretching away to the west, far beyond the line of vision.

Nine miles farther on, Ormondville is reached, and the line enters the Seventy-mile Bush, where some of the finest sylvan scenery in the colony is to be met with. This tract of country contains also almost unlimited supplies of some of the most valuable indigenous timber; and the land, when cleared, is admirably suited for agricultural purposes. The great bulk of the forest is in the hands of the Government, and it has established there two settlements of Scandinavian immigrants—Norsewood and Danevirke—while a considerable trade is also done in timber. In March, 1888, during a particularly dry season, a fire broke out in this part of the bush and completely destroyed the Norsewood settlement, many of the settlers saving their lives with difficulty. After several hours' journey through the magnificent forest, with its occasional stump clearings, rising settlements and, sequestered homesteads, the line emerges finally from its shade, and reaching Woodville the tourist finds himself at the present terminus of the railway. This is a promising centre of inland traffic, and its saw-mills and dairy factory indicate the chief occupation of its people. The portion of the line required to effect a junction with the Foxton-Wellington Railway at Palmerston North is still in course of construction, and when it is completed Wellington will be in uninterrupted communication by land with Napier on the east coast, as it now is with New Plymouth on the west coast.

THROUGH THE MANAWATU GORGE TO WANGANUI.

Through the Gorge to Palmerston the journey is by coach. This Gorge is a chasm, or tremendous rift, in the Rauhiue Mountains, by which the River Manawatu, on leaving Hawke's Bay, enters the province of Wellington. Two miles out of Woodville a gently sloping and winding avenue leads down to the entrance of the Gorge, where the River is spanned by a fine bridge. Fifty feet below rolls the stream, on the farther side of which the buttresses of the hills slope sharply back, covered from the water's edge to the summits with a dense and varied vegetation—tree ferns, *nikau* palms, creepers, pines—whatever in New Zealand forest life is rich and beautiful; whilst overhead from the narrow shelf of road the hills ascend for many hundred feet with an ascent so steep that it strains the eye to follow them to the top. At intervals the sides of the Gorge are seamed with deep ravines, darkened to perpetual twilight by the overspreading green of shrubs and ferns that luxuriate in their dark recesses, down which the cool pellucid runnels tumble from the hills to mix with the yellow water of the River. Owing to the windings of the Gorge, its full magnificence is not at once revealed, and there is something delightful in the feeling of expectation with which one looks for fresh revelations at each successive turn of the road. After passing several pretty cascades that tumble down the hill-side, and rush through culverts underneath the road to the River, the Gorge gradually widens, and presently the coach is out in the open. Beyond the Manawatu the country is level; and, until reaching Palmerston, verdant with rolling grass or grain, and affluent with its herds of sleek-coated cattle. Palmerston North, so qualified in its designation to distinguish it from the other Palmerston in the province of Otago, has been laid out on a large scale. It was originally founded by a colony of Danes and Norwegians, but their identity has been lost in the flowing tide of Anglo-Saxon colonization. Taking the train at Palmerston for New Plymouth, the traveller passes the

townships of Fielding and Halcombe, on the Manchester block, which was settled about 1875 under the auspices of a number of English capitalists, presided over by the Duke of Manchester, and with the Hon. Colonel Fielding as their negotiating agent. It is an excellent farming country, and the abundance of timber which it possesses is also being rapidly turned to marketable account. A few miles farther on lies Marton, named after the birth-place of Captain Cook, and wearing an appearance of prosperity. Nearly the whole of the fertile plain in which it sits has been laid off in square-mile blocks, subdivided into farms of eighty acres each, whereon agricultural operations are conducted with great spirit and enterprise. Marton is the centre of the fertile Rangitikei District, and no finer rustic settlement is to be met with on the route northward. It is a pleasant drive of six miles thence to the township of Bulls, or Clifton, on the Rangitikei River, and the eastern horizon, bounded by the Tararua and Ruahine Ranges, forms a very agreeable picture, while to the northward is very clearly discernible the snow-clad peak of the lofty Ruapehu glistening in the sunlight. From Marton to Turakina the train passes through undulating open country with occasional low-lying hills, until it



MOUNT EGMONT FROM THE SEA.

reaches the settlement itself, which reposes by the side of the Turakina River, within the bosom of a small valley bounded on the west by sand-hills and the sea, and on all other sides by gentle hills. Crossing the River at the bridge, and hastening over open flax and fern country, the line descends again to the bridge of another river, the Whangaehu, and thence runs down to the country drained by the Wanganui. It is a rich and picturesque district, and settlement seems to have made considerable progress throughout its entire extent. At Aramoho Junction the main route is left by means of a substantial railway bridge, and a run of three miles along the branch line takes the traveller to Wanganui, the second town of the province of Wellington.

"The City of the Sand-hills," as its people love to term it, is built upon a fertile alluvial flat upon the right bank of the Wanganui River, and about four miles from the Heads where lie the shipping, and with which it is connected by rail. Sheltered on one side by the banks of the River, and on the others by low sand-hills, it lies secluded from raw and cutting winds, and therefore enjoys a singularly mild and pleasant climate. With its broad and placid stream stretching away through a diversified landscape dotted with rising hamlets and curious Maori villages, with the gleaming crests of Ruapehu, Tongariro and other lofty mountains outlined upon the distant horizon, and with rich and undulating country all around it, Wanganui must certainly be pronounced the prettiest inland town of any note in the North Island. The two principal thoroughfares are Taupo Quay, lying along the River fore-shore and at the back of the Railway Station, and the Victoria Avenue, which strikes off at right angles from Taupo Quay and runs at an even width for fully a mile, and is as straight as an arrow. The River is spanned by a massive iron bridge, six hundred feet in length, and resting upon seven cast-iron cylinder piers, with a swing-span one hundred and thirty feet long and opening out two clear passages, each forty feet wide. "Away from the symmetrical town, nestling round its two sandy moles, and skirted by the silvery River at your feet, your eyes are drawn as by some irresistible fascination to yonder mighty altar, uprearing its spotless architecture right away up from the puny brethren around it, till it stands out clear, distinct, sharp-cut, in virgin purity, looking like 'a great white throne' let down from Heaven. It is Mount Ruapehu, crowned with eternal snows, draped with samite, and glistening in the sun; and yet so calm, peaceful, pure, that as you gaze the spell works, and you stand hushed, subdued, and yet with the sense of a great peace within you." To be seen at its best, however, it must be viewed at sunset, "when the glittering white changes to the faintest pink, and deepens to a rosy red, while the sky blazes with ultramarine, vermilion and gold, and when, after a time, all these glowing colours slowly grow gray, fading like a dream into the shadows of night, but leaving a tawny glory in the west like a pillar of fire."

Wanganui, which is built entirely of wood, is well supplied with water from the Virginia Lake Reservoir, a conservation fed from the Westmere Lake just outside the town. The pleasant country drive of nine miles to the village of Kai-iwi leads past three charming basins, which lend their attractiveness to the changing features of lovely scenery. A Spanish vigneron carries on a flourishing vineyard by the side of the Victoria Avenue, growing some twenty varieties of luscious grapes under glass, in an outhouse about three hundred feet in length by forty feet wide. Another settler has a

nursery of twenty thousand fruit-trees. The industries of the place include an iron and brass foundry and engineering works, a sash and door factory, flour-mills, bone-mills, cheese and bacon factories, hop-gardens and a malt-house, meat-preserving works, rope works, and a steam confectionery and biscuit manufactory and bakery. The chief pleasure ground is the Recreation Reserve on the Town Belt; while Victoria Park at St. John's Hill is greatly used by cricket clubs and picnic parties, and the Queen's Gardens, a hilly enclosure in the heart of the town, contains the remains of the old Rutland Stockade, now devoted to the purposes of a gaol. In the reserve at the rear of the Court House stands a handsome monument erected by the Provincial Government of Wellington "to the memory of those brave men who fell at Moutuo on May 14th, 1864, in defence of law and order against fanaticism and barbarism." So runs the inscription, and the student of New Zealand history will hardly need to be reminded that the saviours of Wanganui, whose memory is thus celebrated, were Maori residents; for here, in this Wanganui District, there has always been a large Maori population, and if the tourist should have the good fortune to visit the town while the Native Land Court is sitting he will see much to engage his attention and stimulate his curiosity. He will find a long double line of Maori tents ranged along the river-side, and groups of the dusky visitors squatted on their haunches in the sun, smoking their pipes, and indolently passing the time away in fitful conversation; while, up the town, the young bloods of the tribe will be found in possession of perhaps a couple of billiard-rooms which they will lease during their stay. Such ardent votaries are they of "the green-cloth" that the chances are that these rooms will not once be deserted, night or day, until the canoes are launched for the homeward journey.



THE RECREATION GROUNDS AT NEW PLYMOUTH.

TARANAKI.

Leaving Wanganui by rail to continue the trip northward, the traveller passes the fine reach of the River between the town and Aramoho, and thence climbs a long incline beautifully diversified with fern-gullies and abounding with charming views. The route lies past Maxwelltown in the sequestered bosom of a valley; Nukumarū, with the post-

and-rail enclosure wherein sleep some of the actors in a desperate engagement; Waitotara, in the heart of a deep and lovely vale, carrying in its background the eminence on which stood the famous Wereroa *pah*; thence by peaceful homesteads and rich pastures to Waverley, in the centre of a prosperous grazing country. Over the Whenuakura River, and through the fertile confiscated block of the same name, the train hurries with unslackened speed till, crossing the Patea River, it enters the province of Taranaki—"The Garden of New Zealand"—and draws up at the Railway Station of the town of Patea. A run of eighteen miles conducts thence to Hawera, a busy township seated in the midst of a plain, and bearing the evidence of having progressed rapidly to its present status. The opening up of the Waimate Plains, lying between the railway and the sea-coast, gave it a powerful impetus, and the Plains are still one of the main sources of its stability. They lie on the other side of the Waingongora River, and are about twenty miles in length by six in breadth. They are dotted over with Maori *pahs* and villages and small European settlements, of which the principal are Manai and Opunake. It is twelve miles from Hawera to Stratford, the nearest point on the line to Mount Egmont, and thence to New Plymouth the route lies through a valuable bush-country, in which extensive clearings, with a view to agricultural occupation, have been made.

New Plymouth has a prepossessing aspect. It slopes gradually upward from the beach amid trees and gardens, and is backed by a dark green zone of native bush, while in the distance towers the majestic form of Mount Egmont, affluent of picturesque beauty, and sufficient of itself to transform into loveliness the tamest landscape. Marsland Hill, formerly the site of a military barracks, is the central point of the immediate foreground, and all around it lie churches, chapels and residences, environed by plantations of trees whose luxuriant growth attests the generous qualities of the soil. At the foot of the hill stands the Anglican Church of St. Mary, built of stone, and containing in its church-yard the remains of many soldiers and settlers who fell in various actions with the Maoris. The business portion of the town hugs the sea-shore; while the Huatoki Creek, as it winds its devious way through the place, adds its own attractions to the *coup-d'œil*. Farther to the east, the Henui River flows past the Public Cemetery, prettily laid out and possessing several interesting memorials of the wars which have convulsed the district at one time or another. The Recreation Grounds are pleasantly laid out, and are an agreeable resort for an afternoon's stroll, or for a row upon the lake in their midst. Next to Mount Egmont, the most striking features of the prospect presented by New Plymouth are the "Sugar Loaves," a cluster of sandstone cones slightly to the west of the town, one of them being on the main-land and the others forming islets just off the shore, which glitters with its dark masses of iron-sand.

The harbour is an open roadstead, and in times past the feat of landing on its surf-bound beach in windy weather had its peculiar excitements and perils, but the construction of a breakwater nearly two thousand feet long has greatly lessened these risks, and improved the shipping facilities of the place. New Plymouth has its gas-works, and it derives an abundant water-supply from the Waiwakaiho River, two miles distant. The entire country between New Plymouth and the Patea River is of exceptional fertility. This natural richness must be attributed in great measure to Mount Egmont, from

whose slopes no less than ninety-seven streams meander through the woods and downs of the district to the sea. Its Waimate Plains have already achieved a colonial celebrity for well-fed stock, and their dairy produce is in great request throughout the North Island, butter especially forming a notable article of export. A charming drive of some nine or ten miles takes one to the rising town of Waitara, on the river of the same name. It is outbidding the older town as the port of call for the through traffic from



THE WELLINGTON POST OFFICE.

the Manukau, and is rapidly developing into a place of importance. Thence the drive may be extended to the Waimate Plains, where the tourist may visit the celebrated prophet Te Whiti, in his native village of Parihaka, in the market-place of which he was wont to deliver to throngs of natives those monthly harangues which were for a long time as eagerly canvassed by the Press of the colony as were the utterances of its public men. The prophet still occasionally speaks, but his *mana* (authority) has practically departed, and he is no longer to be reckoned as a disturbing force in the

country. He himself recognizes the futility of struggling longer, even on the lines of a passive resistance, against the inroads of the *Pakeha*, as he long since satisfied himself of the impolicy of active hostility, and therefore he now counsels obedience and resignation to the white man's rule.

THE CITY OF WELLINGTON.

From New Plymouth to Port Nicholson and Wellington the journey may be comfortably performed in one of the Union Company's well-appointed steam-ships. The entrance to the capital of New Zealand lies between Pencarrow and Palmer Heads, and the only impediment to the navigation is the Barrett Reef, which stands right in the fair-way, but well above the surface, and with a clear breadth of not less than half-a-dozen cables in the main channel. Passing Waddell Point and Ward Island, Halswell Point is at length reached, and rounding it there spreads before the eyes of the traveller a fine view of the capacious land-locked harbour of Wellington, six miles long by six miles broad, with Soames' Island and its quarantine station set right in the centre of a noble expanse of water. Straight in front is Wellington, its business centre grouped along the shores of what was formerly called Lambton Harbour, and its environs extending beyond it on either side, but still from the natural conformation of the ground courting the vicinity of the sea. Immediately behind the city, lofty and sombre-looking ranges tower up in fantastic ruggedness, their base converging towards

the Harbour at the point where lie the wharves and the centre of commerce, but receding inward on either side and thus opening out the flats of Te Aro and Thorndon.

Highly unpromising was the original site of Wellington for the location of a large and important city. Well might the earliest Governor of New Zealand feel his heart sink with dismay as he surveyed the infant settlement planted upon a



WELLINGTON HEAD.

narrow strip of land, bounded by deep water, and overhung by frowning ranges which seemed to interpose an impassable barrier to its expansion. But when the New Zealand Company selected Port Nicholson as the chief seat of its colonizing enterprise, its Directors discerned how richly the future could be made to justify the wisdom of their choice. The two great natural advantages which dominated all other considerations of straitened limits, boisterous gales and proneness to earthquake tremors, were the central position of

the place from a colonial point of view, and the possession of a splendid harbour, with deep water right up to the fore-shore. When, in recognition of its central position, the seat of Government was removed there from Auckland in 1865, both the advantages we have indicated, coupled at last with the presence of the machinery of General Administration, quickly transformed the insignificant "fishing village, somewhere in Cook Strait"—as it



THE QUEEN'S WHARF, WELLINGTON.

was contemptuously styled—into the fourth city of the colony. Wellington still holds only fourth rank in size and importance, but at its present rate of progress it bids fair, ere long, to dispute the title of Christchurch to stand next in order of magnitude to Auckland and Dunedin. Its southern competitor, however, is no laggard in the race of advancement; it still has a much larger industrial population than the "Empire City," and in point of artificial beauty it is far superior. Still, the possession of "a corner lot on the ocean highway" countervails many drawbacks, and when one notes at Wellington how the energy and ingenuity of man have triumphed together there over the parsimony of Nature, the future becomes radiant with promise.

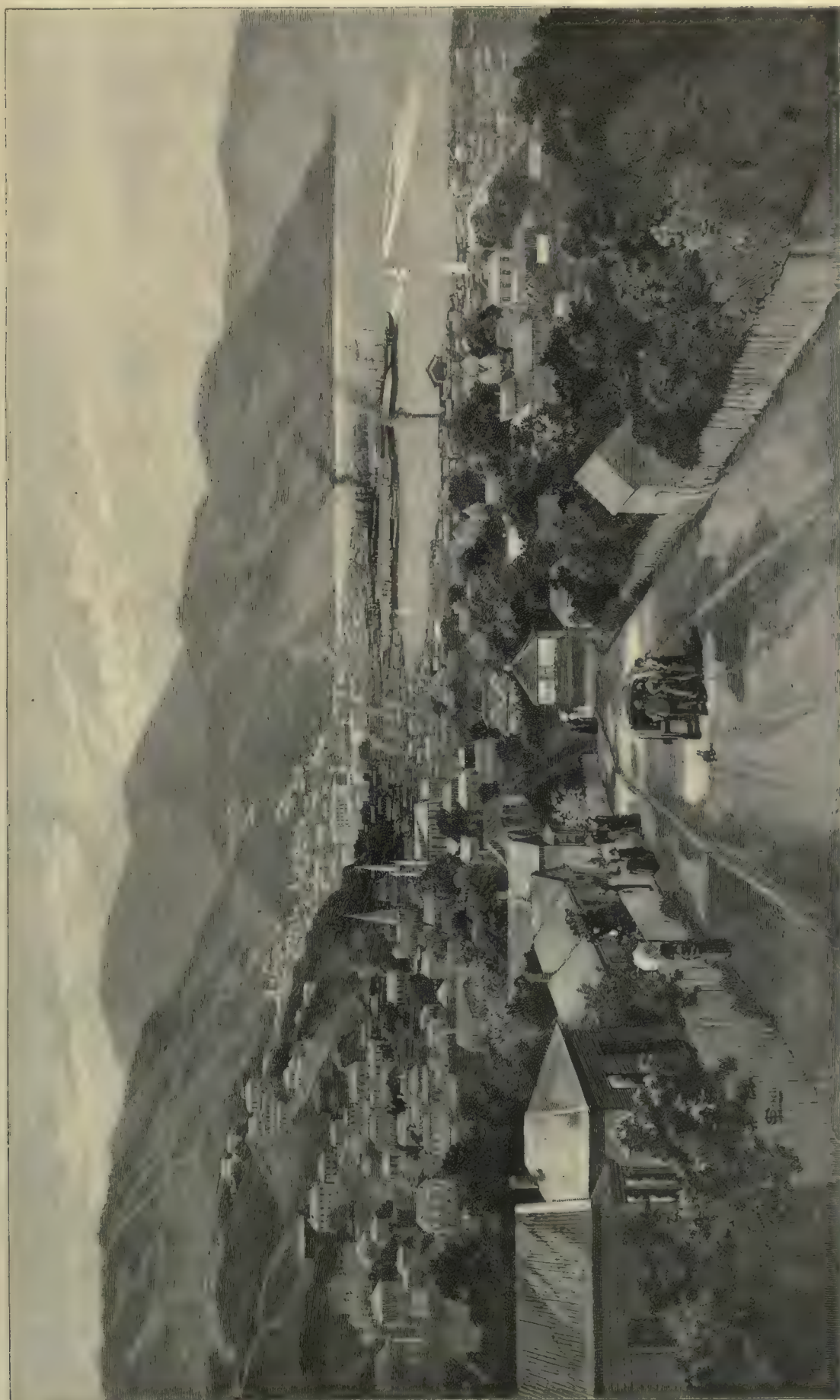
An area of fifty-two acres of ground, reclaimed from what was once the beach, flanked by Lambton Quay, is crowded by bonded stores and warehouses, the Supreme and Resident Magistrate's Courts, the Police Station, the Railway Station and its goods-shed, and the General Government buildings; while Lambton Quay loses the significance of its title through being thrust back from the fore-shore. Farther along, the Wellington and the Manawatu Railway Company has reclaimed a tract of twenty acres additional, between the Thorndon Baths and Kaiwarra, as the site for its own railway station and goods-sheds, and on the other side of the city, between the Queen's Wharf and Oriental Bay, the Harbour Board has reclaimed another vacant instalment of fifty-

three acres. The entire breastwork of all this reclaimed ground may be used for the berthing of vessels, as there is a sufficient depth of water; but the largest craft are accommodated at the Queen's Wharf, a powerfully-built wooden structure, but of no great length, extending from the heart of the city, and amply furnished with shed accommodation for cargo. The Railway Wharf is a more recent work, and derives its name from its proximity to the Station of the Wellington, Hutt and Wairarapa Railway.

As a capital city, Wellington is not likely to impress the stranger. Its streets are narrow and tortuous, the footpaths of proportionately contracted width, and the buildings of all sizes and designs, are built principally of wood and galvanized iron. Some years ago nothing more durable than timber was used, for the very reason that the prevalence of earthquakes then made people afraid to build with brick or stone. That dread has, however, vanished, owing to extended immunity from such alarms, and within the last decade many substantial edifices have been reared at considerable cost. If the odd assortment of buildings produces a mean opinion of the city from an architectural point of view, the bustle of traffic and the general appearance of business activity must go far to convince the visitor of the commercial importance of the place. An ample avenue, planted down the centre with a long double line of pines, with broad asphalted footpaths at the side of them, and seats disposed at regular intervals to tempt the traveller to rest, leads directly from the water-side to the Basin Reserve, and it certainly is the best promenade in the city, while the row of trees practically converts it into two thoroughfares. Where Lambton Quay and Willis Street join hands, Manners Street strikes off to the east, along the sweep of the fore-shore, and carries us into Courtenay Place, which also hugs the Harbour, and leads round the "Rocks" by an easy and picturesque walk to Oriental and Evans Bays. Just at the back stands Mount Victoria, crowned by its signal-station, alluring the wayfarer to scale its side for the sake of the view to be obtained from its summit; while a fine panoramic survey of the neighbouring landscape is to be had also from the brow of the Botanical Garden Reserve, behind the elevated stand of the Terrace.

Passing up a right-of-way at the side of Barrett's Hotel, the visitor mounts to Boulcott Street by several steep flights of wooden steps furnished with hand-rails. These are well-known as Plimmer's Steps, and are a fair type of the original—nay, even of many of the present—means of access from one street to another lying above the narrow strip of flat which forms the heart of the city. In fact, the Terrace is approached at half-a-dozen various points from the leading thoroughfares by these rude and primitive stairs, which, if ill-accordant with the pretensions of a capital city, are at any rate genuine and interesting relics of early Wellington. After mounting Plimmer's Steps we pass the head of Boulcott Street, and hold straight on up the hill to Wellington Terrace, and thence we rise by a gradual ascent to the hill whereon is the Roman Catholic Cemetery. From this point we gain a comprehensive view of the Te Aro end of the city, where reside the bulk of the population, and especially the industrial portion of it. There, too, are situated the Asylum, the Hospital, the College, the Armed Constabulary Barracks and the Basin Reserve. Beyond Te Aro, the eye encounters Mount Victoria, while more remote still, but hidden from the gaze, the shore curves into the recess of Evans Bay, with its patent slip capable of accommodating vessels up to a capacity of

two thousand tons, and with the charming little township of Kilbirnie nestling upon the slopes at its back. Turning the head to the opposite direction, a view is obtained of



THE CITY OF WELLINGTON.

the pretentious quarter known as Thorndon, with its fine residences and lovely gardens, and nearer the city proper such striking edifices as Government House, the Parliament

Buildings and the Roman Catholic Cathedral of St. Mary. On the eastern side of Lambton Quay the attention is riveted by a massive pile of wooden buildings, covering two acres of ground, consisting of one hundred and fifty-two rooms, and containing no less than twenty-two chimney-stacks. These are the General Government Offices, and they are said to form the largest wooden building in the world. They possess seven public entrances, each approached by a flight of ten steps under Roman-Doric porticoes. The elevations are Italian in style, plain in design, with projecting eaves and modillions. The



ST. ANDREW'S PRESBYTERIAN CHURCH.

new Government Printing Offices—a rather squat pile of brick—occupy the nearer corner of the adjoining block. They are furnished with the electric light, but are said to be imperfectly ventilated, while great fault is found with the design.

On the opposite side of Lambton Quay from the General Government Offices stands Government House, amid grounds well planted with trees. The building itself, which is of wood, crowns a slight elevation, and is in the Italian style of architecture. This is the residence of the Governor while Parliament is in session, and during the major portion of the year. Sydney Street flanks the northern side of the Government House Reserve, and divides it from the Parliament Buildings. The latter form a pile of wooden buildings in the Gothic style, their numerous gables crowned by iron rods carrying ornamental vanes, the effect of the façade being enhanced by small steeples. Here meet, during the winter months of the year, the Legislative Council and the House of Representatives, the average duration of the session being from three to four months. The Council is a body whose Members are nominated for life, and corresponding to the House of Lords in the British Legislature. The popular Chamber used to consist of ninety-one European and four Maori representatives; but a recent Act has reduced the number to seventy-five. The Members receive an *honorarium* for their services, and those of them who reside out of Wellington are paid their travelling expenses from and to their homes. Both Chambers are illuminated with the electric light. The Parliamentary Library is said

to be the best in the colony. It is especially rich in its legislative archives and works of reference. In close propinquity to the Houses of Parliament stands the spacious wooden

building in which is housed the Colonial Museum, a monument to the devotion and scientific zeal of Dr. (now Sir James) Hector, who has had charge of it ever since its foundation in September, 1865. The nucleus of this fine establishment was formed with the collection from the Museum of the New Zealand Society, and since then it has been receiving constant accessions of deposits and donations, until now it is one of the most complete of its kind in the colony. Its collection of articles of Maori archæology and curiosities is, in its way, quite unique, and of great value. The principal feature is the Maori house originally constructed at Tauranga by the Ngatikaipoho tribe, and remarkable for the excellence of the carving lavished upon it in the best style of Maori art. Eighteen of the most skilful native carvers were engaged for a considerable time in the fashioning of the strange uncouth figures which are ranged along its walls.

To the right of the Parliament Buildings stands the Roman Catholic Church of St. Mary's, the central roof of the edifice flanked by walls much lower in height, and with a tower and spire over the main entrance. Like the other ecclesiastical structures of Wellington, it is built of wood. Under the same spiritual administration is St. Patrick's College, a handsome



THE HOUSES
OF PARLIAMENT.



THE GOVERNMENT BUILDINGS.

building erected, in 1884, in the Te Aro quarter of the city, and on a commanding site. The other leading educational institution of the place is the Wellington College, situated, in the same part of the city, upon a hill-side near the Adelaide Road, and surrounded with grounds having an area of no less than seventy-five acres. The primary schools are in number and size fully equal to the requirements of the population. Chief among

the Anglican churches stands St. Paul's Cathedral, in the Thorndon quarter, but St. Peter's, rebuilt in Willis Street in 1880, has a spire one hundred and thirty-five feet high. For internal finish, however, St. Andrew's Presbyterian Church, situated on the Terrace, unquestionably bears off the palm. The other Presbyterian Church of St. John's is in Willis Street, and possesses a very fine organ and an efficient choir.

One of the handsomest buildings of Wellington is the Hospital, erected on a rather bleak situation on the hill-side near the Adelaide Road. Not far off is the wooden structure of the Lunatic Asylum, both edifices, along with the Gaol and the Armed Constabulary *Dépôt*, being located in the Te Aro quarter of the city. The places of public entertainment consist of the Theatre Royal, the Princess Theatre in Tory Street, St. George's Hall, and the Masonic, Rechabite and Oddfellows' Halls, as well as the Columbia Skating Rink. The Te Aro Opera House in Manners Street was indisputably the finest building of the kind in the colony, but unfortunately it was burned to the ground in the beginning of 1888. All the leading banks and insurance companies are worthily represented, while the industries of the place comprise several frozen meat and export companies, two foundries, tanneries, soap and candle works, coffee mills, sash and door factories, brick, drain and tile works, a coach factory, saw-mills, a flour-mill, woollen-mills, breweries, boot factories, and cordial, biscuit and confectionery works. A private company supplies Wellington with gas, and another company has furnished a capital system of trams, extending from the Railway Station at Pipitea Point, at one end of the city, to Newtown, at its other extremity, whence anyone in search of the picturesque may penetrate to Island Bay, scarcely a mile distant. The Island Bay Park Company has constructed a race-course and a people's park on the flat near the beach, and successful race meetings are held here three or four times a year. Still, it is at the Hutt, about ten miles distant from the other side of the city, that the Wellington Racing Club holds its periodical meetings, and that the annual contest for the Wellington Cup always takes place.

The people of "The Empire City" possess in full measure the Briton's love for the water, and with such a fine harbour it would be passing strange were it otherwise. They possess two swimming baths and two first-class rowing and boating clubs, while the annual regatta is quite a feature in its way. The Corporation has obtained for the city a magnificent water-supply. Originally, the water was procured by a diversion of the Kaiwarra stream through a tunnel into a reservoir in Polhill Gully, up the hills at the back of the city, but as this source was deemed insufficient, an inexhaustible supply from the Wainui-o-mata River, sixteen miles distant, has been provided at a cost of one hundred and thirty thousand pounds.

Wellington is by no means deficient in pleasure and recreation grounds. First in attractiveness come the Botanical Gardens, at the back of the Terrace, and approached by the Tinakori Road, or Sydney Street. They cover an area of one hundred acres of hilly ground, originally dense bush, and still containing many clumps of native timber in its primeval state. The Basin Reserve in Sussex Square is the favourite resort for cricket and foot-ball, and the people are intensely fond of both games. Newtown Park is another reserve of a similar kind, but of more recent formation. No one who visits Wellington fails to hear of McNab's Gardens at the Lower Hutt, or neglects to see



WELLINGTON HARBOUR.

them. A pleasant drive of an hour, past Thorndon and along the curvature of the Harbour, takes one to the charming valley in which they lie—a valley originally destined as the site of the city, which was then dignified with the pretentious title of Britannia. But an inundation from the erratic Hutt overwhelmed the tiny settlement and obliged its founders to shift their location to Thorndon Flat.

The valetudinarian may with confidence take up his residence in the capital of New Zealand. In the charming complexions of the ladies there is as notable an attestation

of the salubrity of the place as even the vital statistics will furnish. True, the winds are sometimes so boisterous that it has passed into a proverb throughout the colony that you may infallibly recognize a Wellingtonian by his habit of putting a precautionary hand to his hat as he approaches a street corner, but then the prevalence of wind is a sure guarantee that the atmosphere is kept sweet. In common with the other large ports of the colony, the Harbour has its defence works. There is a battery of heavy guns at Point Halswell, which commands the entrance, and above Kaiwarra, in a commanding position on the hill-side, there is another heavy battery, so that a hostile cruiser would have no easy task before it in any attempt that might be made to levy black-mail on the city.

OVER THE RIMUTAKA TO MASTERTON.

No greater engineering feat has been performed in New Zealand than in the construction of the railway line from Wellington over the lofty Rimutaka Range to the Wairarapa District. The scenery presented along the route is worth coming hundreds of miles to see. The train which leaves Wellington plunges through the rich alluvial valley of the Lower Hutt, and thence over the Silver-stream, penetrating birch-woods and bush-clearings to the Upper Hutt, whence the iron horse toils up a wooded ascent to Mungaroa. Through deep cuttings, and across numerous gullies, we mount higher and higher, until, reaching Kaitoke, we prepare to undertake the *crux* of the trip, for



PLIMMER'S STEPS.

some of the gradients now to be encountered are as much as one in fifteen, and many of the curves are of five chains' radius. We make acquaintance here with the Fell locomotives, four of which cost the Government no less than nineteen thousand pounds. They are exceedingly powerful engines, and in addition to the side wheels they are provided with centre ones as well, which grip a corresponding central line of rail, rising some eighteen inches above the level of the flanking rails, and, in this manner, two of the locomotives—one harnessed in front of the train, and the other behind—haul it up the



THE RIMUTAKA GORGE.

desperate incline. As the locomotives pant and snort on their toilsome progress up the tremendous ascent the traveller finds the pace by no means too slow, for the grandeur of the changing scenery tempts the eye to linger upon its features of striking interest.

Ever and anon a serpentine course is pursued along a narrow causeway excavated from the winding wall of cliff—and the traveller hangs as it were, like Mahomet's coffin, between earth and heaven—away above his head a precipitous face of frowning rock, and deep below, how

deep one cares not to enquire, yawning gorges and ravines, to fall into any one of which would be instant and terrible death. One begins to wonder when this maze will end, when the sign-board of a siding informs him that he has compassed the seven miles lying between Kaitoke and the Summit, and that the descent is now to begin.

But the descent is still more exciting than the ascent, for, on this side, Boreas always seems to hold open court. There are four tunnels on the line, and between two of them lies the place called Siberia, where, in September, 1880, a furious gale, sweeping up from the gully beneath as if forced through a funnel, hurled several of the passenger carriages off the rails and into the gully, with the result that four persons were killed outright, and some others were wounded. Since then the danger has been minimized by the erection of break-winds, and the gales may now be set at defiance. There is also a "running siding" in case the engines should become unmanageable by making the descent too quickly. From the Summit it is eight miles to Cross Creek Station, where the train once more regains level ground, and parts company with the couple of "Fells."

The route now emerges upon the Wairarapa Plain, which extends from the mouth of the Lake of the same name in Palliser Bay to the head of the Pairau Plains, a distance of nearly eighty miles, and with an average breadth of some ten miles. The extensive and shallow Wairarapa Lake soon breaks upon the view, and to sportsmen the intelligence that its shores abound with wild duck and black swans may be sufficient inducement to court closer acquaintance with it. To the Maori mind its chief recommendation is its wealth of eels. The valley itself bears all the evidence of having at no very distant date formed the bed of part of the Lake, or of an inland sea, and as a consequence the soil is of poor quality, fit rather for pastoral purposes than for agricultural enterprise. To pasturage, therefore, it is mainly devoted. Eight miles from Cross Creek lies the township of Featherstone, founded in 1854, and named after a popular Superintendent of the province. It covers an area half-a-mile square, and presents a comfortable aspect to the traveller.

Seven miles farther on, the train stops at Woodside Station, and a branch train is in readiness to carry away those of the passengers who are bound for the township of Greytown, which may be clearly discerned in the distance, built in straggling fashion upon both sides of the road leading to Masterton. It was, of course, named after Governor Sir George Grey, and was originally settled by a "small farm" association, for whose members the land was cut up into one-hundred-and-twenty-acre blocks. At another interval of seven miles, the township of Carterton is met with, and the prevalence of timbered land adds greatly to the attractions of the prospect, besides affording scope for a busy saw-mill. There is also a dairy factory in the district, and to the outward view every manifestation of plenty and settled content. A stretch of nine miles through forest and pasture land takes the tourist to the isolated railway station of Masterton, and 'busses are in waiting to convey travellers and their luggage over the couple of miles that separate them from the township. It is a pleasant drive, and forms an agreeable introduction to the largest and certainly the most attractive town of the Wairarapa District. It is the centre of a rich pastoral country, and its situation on a far-extending plain, once covered with timber, but now pretty well cleared and laid down

in grass, with charming homesteads, clumps of bush, sleek herds and flocks dotting the prospect on all sides, and with the snow-clad Tararua Ranges away in the dim distance, is one that cannot fail to most favourably impress the beholder, and to tempt him to a



THE TOWN OF PICTON AND QUEEN CHARLOTTE SOUND.

prolonged sojourn. The neat and well-formed thoroughfares bear testimony to the efficient control of the Borough Council, and the numerous wooden shops, stores and hotels mark the presence of a well-to-do community. The people are wide-awake and are fully

convinced that they are building up the frame-work of a large and important inland city. So far pastoral pursuits predominate in the district, and holdings ranging in area from forty to forty thousand acres. The rabbit is a colonizing agent which compels greater attention here than in any other part of the North Island, and the settlers have long ago come to the conclusion that the pest takes up too much room and must be extirpated. How to accomplish that end remains a problem yet to be solved.

Twelve miles beyond Masterton by rail lies the Scandinavian settlement of Mauriceville, planted in the midst of the forest out of which its site has been hewn. The railway line is open for four miles farther, and it is being actively pushed on to Woodville, with which, ere long, it will connect, thus affording a direct alternative route to Napier. Meanwhile the existing gap is bridged by coaching through the Forty-Mile Bush, where the road runs parallel to that through the Seventy-Mile Bush, and both introduce the tourist to some of the best specimens of virgin forest to be found in New Zealand. They are bound to be the seats of a large industrial population, while the timber is a legacy of natural wealth whose value is incalculable. In this connection it may be noted that the colony's annual output of kauri timber amounts altogether to about one hundred and ten million feet, while the timber in the kauri forests at present known is estimated at twenty-three billion feet. The tree rises to a height of one hundred feet without a branch, and the timber is largely exported in what is called "junk," the logs being squared with an axe. In view of the large demands of the trade, and its great value to the colony, the question of forest conservation in New Zealand is becoming an important one.

THE TOPOGRAPHY OF NEW ZEALAND.

The islands which appertain to the northern division of the colony may be set down as the Chatham and Kermadec Groups, and the three islands which form the Chatham Group lie about four hundred miles to the eastward of Cook Strait, and are in regular communication with Akaroa. They are distinguished from the other islands by their greater extent, superior fertility—supporting as they do a population of some seven hundred—and milder climate, while the ethnologist will find them especially attractive from the fact that they contain the remnants of the Morioris, an undersized dark and Papuan race, whom the Maoris are said to have dispossessed when they landed in New Zealand. Chatham Island itself is forty miles long, of irregular shape, and marked by numerous bights on the coast-line, with small lakes. The land generally lies low, and the principal pursuits of the people are pastoral and agricultural. Wild pigs abound, and wild ducks, curlew, plover and pigeons furnish plenty of sport. The area of land is about six hundred thousand acres. In spite of the fact that Lieutenant Broughton, R.N., in 1791 took nominal possession of the Islands for the British Crown, the New Zealand Land Company, in 1841, claiming exclusive possession, proposed to sell them to a German company which intended to place them under the national flag of the Hanse Towns. Lord Stanley, however, promptly interfered, and defeated the imprudent project by asserting the paramount authority of the Crown.

The Kermadec Group is the latest addition to New Zealand territory. Great Britain hoisted her flag over these islands in 1886, and when she checked New Zealand's

aspiration to annex Samoa, maternal indulgence led her to soften the disappointment by presenting her hopeful offspring with the Kermadecs. Accordingly New Zealand, in 1887, sent down the Government steamer *Stella* to proclaim her supremacy over them. They comprise four islands, extending over some one hundred and fifty miles of sea-way, and are distant about six hundred miles north-east of their foster-parent. They were discovered in 1788 by the transport *Lady Penrhyn*. D'Entrecasteaux named them in 1793; D'Urville passed them in 1827, and whalers and some few settlers afterwards broke their solitude for a time, but were discouraged by volcanic outbreaks. For nine years the Kermadecs remained uninhabited, and then, in 1878, a gentleman named Bell repaired thither with



THE FRENCH PASS.

his family from Samoa to subdue the semitropical wilderness, and under his hands considerable progress in cultivation and in the increase of stock has been made. Steam may still be seen escaping from the precipitous cliffs of Denham Bay, and on the northern coast warm water oozes out of the sand. The centre of the Island is formed of a crater a mile and three-quarters long by a mile and a quarter wide, from whose rim, averaging one thousand feet high, spurs are thrown off towards the coast. Macauley Island, with an area of seven hundred and fifty-six acres, is an extinct volcano, and Curtis Islands and L'Espérance, or French Rock, are somewhat less in area.

A great mountain range, trending south-west to north-east, runs through the whole of New Zealand from the South Cape to the East Cape, the only interruption being Cook Strait. In the North Island the volcanic forces are still active, and three distinct volcanic zones are clearly defined. The principal of these is the one known as the Taupo zone, extending from Mount Egmont on the west coast past Lake Taupo, through the Hot Lake region of the North Island to White Island in the Bay of Plenty. Right in the centre of the Island stand the two giant volcanic cones of New Zealand—Ruapehu and Tongariro, the former over nine thousand and the latter upwards of six thousand feet high. Tongariro is active still in *solfatara*, and its craters are constantly steaming. Ruapehu gave forth steam immediately before the outbreak at Rotorua in 1836, as well as some time after, but apparently it has resumed its deep repose. A company of smaller cones, Pihanga,

Hauhanga, Kakaramea and others lie in the surrounding district, and are called by the natives the wives and children of the two giants. It is also part of this fanciful tradition that Mount Egmont formerly stood beside Tongariro and Ruapehu, but that having quarrelled with the latter he fled to the west coast where he still dwells in sullen isolation. Tarawera, in the very centre of the Hot Lake District, was thought to be an extinct volcano until 1886, when it suddenly burst out with terrific violence and devastating effect; but it is now again inactive. The second volcanic zone spans the narrow isthmus on which the city of Auckland is built, but its numerous cones have not within the memory of man exhibited any tremors. In the Bay of Islands District is situated the third zone, small extinct cones and occasional hot springs and *solfataras* indicating its limits.

These volcanoes are quite distinct from the grand mountain chain which, in the North Island, passes to the eastward of Lake Taupo, starting from Cape Palliser and trending away to the East Cape. It includes the forest ranges of Tararua, Ruahine, Kaimaniwa and Te Whaiti, but its highest peaks do not attain a greater altitude than six thousand feet. The Main Range is divided in its centre by the deep gorge through which flows the River Manawatu. After Ruapehu, Tongariro and Egmont, the highest peaks are Ikurangi (five thousand five hundred and thirty-five feet) and Pirongia, the former near the East Cape and the latter in the Waikato country. In the province of Auckland there are the Coromandel, the Pataroa, the Wairoa and the Hakarimata Ranges, besides others of much less note. Farther north the highest mountain is Maungataniwha, some distance beyond Hokianga. The North Island, as a whole, is largely diversified with unimportant mountain ranges and hills.

The rivers of the North Island have already been mentioned in their places, so that little more is required here than a mere recapitulation of their names. This part of the colony is particularly well favoured with regard to water intercommunication. The most northerly of the rivers is the Hokianga, about fifteen miles long, and receiving the Mangamuka, Waima, Whirinaki, Omanai, Motukaraka, Orewa and Hauraki Rivers. The Awanui falls into Rangaunu Bay, and the Kaipara Gulf receives no less than seven important streams, among which are the Northern Wairoa, navigable for one hundred and fifty miles; the Otamatea, the Arapaua, Oruawharo and Kaipara Rivers. On the eastern coast the Wiahou, or Thames, and the Piako discharge themselves into the Firth of Thames, the former of which receives the Wairere. The Waikato, the longest river in the colony, rises in Ruapehu and flows through Lake Taupo, receiving the Waipa at Ngaruawahai. Farther south is the Mokau, forming the boundary between the provinces of Auckland and Taranaki. In the Bay of Plenty District are the Rangitaiki and Whakatane, and beyond East Cape is the Waiapu. The Wairoa falls into Hawke's Bay, and the Ruamahunga into Palliser Bay. On the western coast south of the Mokau are the Waitara, Patea, Waitotara, Wanganui, Rangitikei and Manawatu. This last-named river is remarkable for the wild and striking character of the scenery along its banks, in which respect this part of the country is not to be surpassed.

Stewart Island, named after the whaling captain who demonstrated its insularity in 1816, is, of course, the chief of those appertaining to the South or Middle Island of New Zealand. The Maori name was Rakiura, but this, with the later one of New Leinster, has fallen into disuse. It lies at an average distance of only fifteen miles

from the South Island; its greatest length is thirty-nine miles, and its utmost breadth a trifle over twenty miles. An irregular ridge of mountains culminates in Mount Anglem, three thousand two hundred feet high, and Rakeahua, with an elevation of two thousand



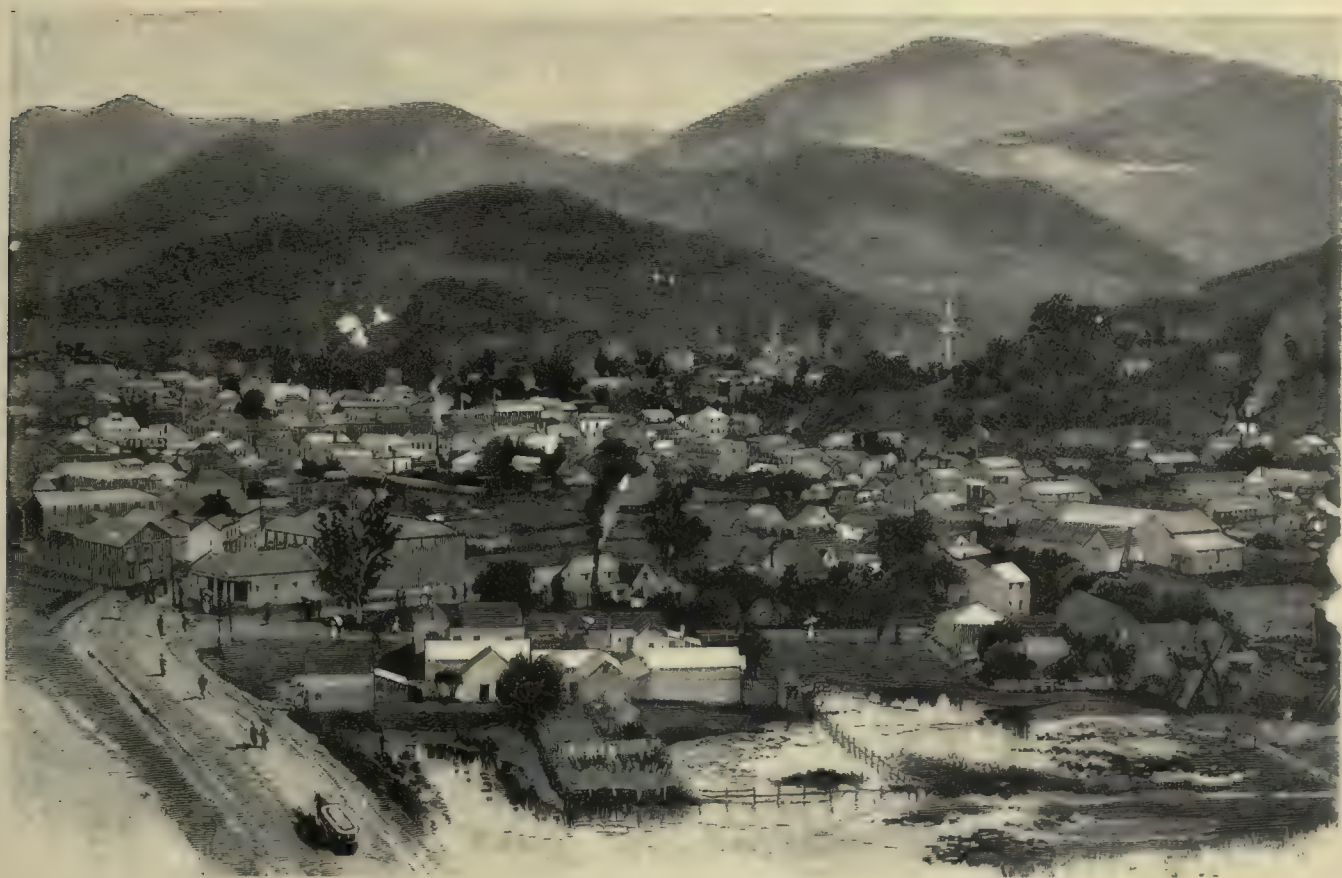
THE HOP HARVEST IN THE NELSON DISTRICT.

one hundred and ten feet. Port William is the head-quarters of whaling and sealing schooners, and Paterson's Inlet extends more than half-way across the Island. The scenery is attractive, especially at Port Pegasus and Mason Bay. Of the few hundred

inhabitants of the Island the majority are half-castes. Its oysters have extended the repute of Stewart Island throughout Australia. The Auckland Islands lie some hundred and eighty miles to the south of New Zealand. They were discovered in 1806, and some forty years later leased by the Crown at a nominal rental to the Southern Whale Fishing Company. Auckland Island, the largest of the group, is about thirty miles in length. Campbell Island, one hundred and forty-five miles south-east of the Auckland Islands, is akin to them, and is about thirty miles round. Macquarie Island, the most southerly of the Australasian Group, is frequented only for its seals. It has a high altitude, is five or six miles broad, and some twenty miles long. The barren clusters of rocky islets known as the Bounty Group and the Antipodes Islands are intermediate between the Chatham and Auckland Groups.

The South Island is *par excellence* the place for Alpine scenery. The mountain ranges which lie along the southern shores of Cook Strait converge as they penetrate south until they combine to form that grand cordillera which, in the province of Canterbury, attains its highest elevation in such lofty peaks as Mount Cook (twelve thousand three hundred and forty-nine feet), Stokes (separated from Mount Cook by a steep col more than seven thousand feet high), Tasman, Tyndal, Darwin, Sefton and Hochstetter, most of which are over eleven thousand feet high. The northern boundary of this mighty mass is said to be Harper's Pass, three thousand five hundred feet high, but still, north of this limit, the chain, now grown more irregular, rises into the Spencer Mountains in Nelson Province, and these attain a considerable altitude in Mounts Franklin and Humboldt. South of Mount Cook, the Southern Alps divide, at Mount Holmes, into the Hooker, the Gray and the Ritter Ranges, but both chains unite again in Mount Stuart and continue in broken form towards Mount Aspiring. On their western side a strip of land with an average breadth of some fifteen miles constitutes the province of Westland, and on the eastern side are the plains of Canterbury. The mountain ranges of Otago have been aptly compared by the Provincial Geologist, F. W. Hutton, to the fingers of the right hand widely spread out, but with the first and second fingers approximated, and with the palm resting in the south-west part of the province of Canterbury. In this case the thumb will represent the Hawkdun and Kahamui Mountains, running north-west and south-east, which form the southern boundary of the Valley of the Waitaki. The first finger will represent the Dunstan and Lammerlaw Ranges, which form the eastern water-shed of the Clutha. Between this finger and the next are the Raggedy Range, Rough Ridge, Rock and Pillar Range and the Silver Peak Hills. The second or middle finger will represent all that rugged tract of country between Lakes Wanaka and Wakatipu, called the Harris and Richardson Mountains, continued southward in the Remarkables, Garvie Mountains, Obelisk Range and Umbrella Mountains, and running through the Kaihiku Mountains to the sea at Nugget Point. The third, or ring finger, will represent the Humboldt Mountains, the Thomson and Livingstone Mountains, the Takitimu and the Longwood Ranges, lying between Lake Wakatipu and the Oreti River on the east, and the Hollyford River, Lake Te Anau and the Waiau on the west. Between these and the next finger come the Hokonui and Moonlight Ranges, and lastly, the little finger will represent the west coast mountain range running in a north-easterly and south-westerly direction.

Nearly all the rivers of the South Island take their rise in the grand central mountain chain. The Wairau falls into Cook Strait at Cloudy Bay, and close to the same source rise the Waimea and Motueka, flowing into Blind Bay, and the Kaituna and Waitohe which flow into Pelorus and Queen Charlotte Sounds. The Buller reaches the ocean some miles north of Cape Foulwind, and the Awatere, rising in the Kaikoura Range, finds the sea near the White Bluff, and still farther south is the mouth of the Clarence. The Waiau-ua and Hurunui, Waimakariri, Rakaia, Ashburton,



THE TOWN OF NELSON.

Rangitata, Selwyn, Hinds, Ashley and other smaller streams follow, and there are several of what are called leakage rivers, like the Heathcote, Avon, Styx, Little Rakaia and others whose course is intermittent. In Otago are the Waitaki and Awarua, the Ahuriri, Taieri and the Clutha, or Molyneux, which is the largest river in the South Island, receiving among other tributaries the Kawarau. The Maitara, Oreti and Waiau follow, the last-named receiving the Mararoa, Monowai, Borland, Dean, Lillburn, Wairaki and Orawea, along the one hundred and forty miles of its course. On the west coast are the Awarua, Hokitika, Arahura, Teremakau, Grey and Buller Rivers. The Aorere gives its name to a densely-wooded timber valley before it finds its way into Blind Bay.

MARLBOROUGH AND NELSON.

After leaving Wellington, the first port of call in the South Island is Picton, situated on the immediately opposite side of Cook Strait at its narrowest part, and within the deep recess of Captain Cook's favourite haven, Queen Charlotte Sound, which he has tersely described as "a collection of the finest harbours in the world." Passing through the Tory Channel, the entrance to the Sound is ample, the water deep, the

tides regular, both shores indented with capital bays and coves, and fresh water and timber abundant. The scenery is charming; forest-clad hills; plashing streams emerging from gullies and gorges resplendent with tree-ferns, palms, flowering shrubs and trees; birds of attractive plumage flitting about; and fish leaping from the placid bosom of the water—such are the constituent features of the *coup-d'œil*. An amphitheatre of hills locks in the voyager from the outer world. The White Rocks, Motuara and Long Island lie within the entrance, and abreast of Motuara are three coves, the most southern of which is Ship Cove, familiar by name to every reader of "Cook's Voyages." The double bay of Waitohi, on the southern side, contains the port and town of Picton, chief outlet for Marlborough, the smallest province of New Zealand. It was detached from Nelson in 1859, and has an area of about three million acres. Its physical geography may be summed up as a succession of parallel valleys and mountain ranges, running generally north-east and south-west, the most northerly and westerly valleys being those of the Pelorus and the Rai, which are covered with valuable forests prolific in such marketable timbers as the white pine, *rimu*, *matai* and *totara*.

Picton is a very small place, and if the man of commerce is disappointed with it the tourist will find the scenery replete with interest. The town is built on an alluvial flat of no great width, backed by undulating ranges, and the buildings skirt the water-side. Although only a small place, it supports five hotels, has its own newspaper, and possesses several churches, besides a telegraph office, a court-house and a hospital; there are also saw-mills in the vicinity. Moreover, it is connected by rail with the provincial capital, Blenheim, which lies in the centre of the Wairau Plain, eighteen miles distant—that same Wairau Plain which in 1843 was stained with the blood of the settlers who fell in the first serious conflict with the Maori. Blenheim is situated at the confluence of the Rivers Omaka and Opawa, and is a busy and interesting little place, furnished with all the comforts and conveniences to be expected in a township of its size. The leading banks and insurance companies are represented; Ewart's Hall and the Oddfellows' Hall fully meet the demands of public entertainment, and there is besides a literary institute with a good library, while the hotel accommodation is ample. Market Street is the principal thoroughfare. The Telegraph Station is the most important in the colony, for this is the point whence all South Island messages for the sister island are forwarded to Wellington, and it is also the distributing station for messages from the North Island for places situated in the South.

Leaving Picton, and clearing Cape Jackson on the course westward to Nelson, the tourist steams across the entrance to Pelorus Sound and past the mouth of Admiralty Bay, with its hilly, wooded islets, to Blind or Tasman Bay. It is approached by the narrow wall-like French Pass between D'Urville Island and the main-land. Right in front appears a mass of green mountains, apparently impenetrable, to which the vessel approaches nearer and nearer, until all at once she shoots round a projecting limb, and enters a rocky channel one hundred and seventeen yards broad, with a strong and swift current running at the rate of from eight to ten miles an hour. High hills completely shut in this truly straight and narrow gate, and the scenery is striking in the extreme. Passing out of it, the eastern side of Tasman Bay is coasted, with the Castor Peak stretching over Croisilles (*Croix Ile*) Harbour, to a height of from three thousand



THE BULLER ROAD AND RIVER.

three hundred to three thousand eight hundred feet, while farther on the sharp cone of Mount Rintoul pierces the sky at an altitude of four thousand seven hundred and twenty feet.

Nestling within the retirement of the Bay, and on its south-eastern side, lies Nelson, the chief town of the province. Both shores of the Bay are margined by towering mountains, and between the town itself and a lofty range in the background extend the

Moutere Hills, composed of irregular and imperfectly-stratified beds of shingle, gravel, sand and clay, resting upon tertiary *strata*. The port of Nelson lies within the sheltering arm of a curious natural breakwater called the Boulder Bank. It consists of rounded pebbles on boulders. At high-water a large portion of it is submerged, but at low-water, a difference of fourteen feet, it is dry throughout its entire length. The largest and heaviest boulders face the sea; on the harbour side they become smaller, and near the entrance they are so small "that vessels there can drive on the strand without any damage, thus using the place as a natural dry-dock, in consequence of the great difference of the water-level between ebb and flow."

Completely environed inland by its hills, secluded too from the gales that frequently whip the waters of the Strait into turbulent activity, with a sky of cloudless azure and a balmy climate that seems like perennial summer, Dr. Johnson would have found in Nelson the sober realization of the "Happy Valley" which he dreamed of for that creature of his imagination, Rasselas, Prince of Abyssinia. It is the "Sleepy Hollow" of New Zealand, though its inhabitants are as active and enterprising as their fellows elsewhere; but as the province is mountainous, and chiefly adapted for pastoral purposes, they have perforce lagged in the race of progress. Nelson remains the place for a quiet holiday, for learned leisure, for spending a calm, uneventful existence, "husbanding out life's taper to its close" amid scenes of idyllic beauty.

A straggling cluster of houses has sprung up about the Port and its substantial wooden wharf, but the town itself lies a little farther back and is approached by the first tram-line constructed in New Zealand. It was the work, many years ago, of an English company formed for utilizing the deposits of chrome-ore on the Dun Mountain, a sterile-looking ridge of rusty-brown colour, which springs to an altitude of some four thousand feet at a distance of a few miles south-east of the town. The tram-way has outlived the Company, and now does a good passenger traffic. The town itself is pretty and picturesque. A small stream called the Matai meanders through it along willow-fringed banks, and the dwellings of the people, lying not far distant from the leading business thoroughfares, are gay with pleasant gardens. The heart of the town beats in Trafalgar Square, but it beats very placidly, and is rarely troubled with any serious excitement. It has its Theatre Royal, its Masonic Hall, its Provincial Hall, its two daily papers, and water-works, gas-works, a literary museum, hotels, banks and the other adjuncts of civilized life, as well as churches (one of them the Cathedral), schools, a Roman Catholic orphanage, a public hospital and a lunatic asylum. Its Boys' and Girls' High Schools won for themselves so high a repute that pupils resort to them for their education from all parts of New Zealand.

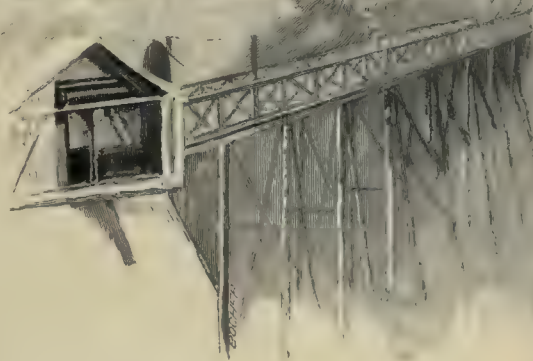
The leading industries of Nelson comprise leather, soap and jam factories and breweries, but the distinctive industry of the place is suggested by the prevalence of hop-gardens. Nelson hops are famed throughout the colony, as well as beyond it, and it requires no prescience to divine that this district is destined to be the Kent of the Britain of the South. But the province is far richer in natural wealth than the English county. It has been pronounced by good authority to be "the veritable home of minerals." Coal, copper, oil-shales, zinc, marble, granite and hæmatite have all been discovered in large quantities; of hæmatite ore, the quantity exposed at the Parapara

River alone is estimated at about fifty-three million tons, and there is another bed in the same locality sixty feet thick. A capital view of Nelson is obtainable from the Zig-zag Hill, and one of the pleasantest roads out of the town is that to the water-works, about an hour's drive. The road skirts the Matai, here as elsewhere fringed with willows, and spanned by rustic bridges. Villas and cottages embosomed amid trees and gardens fill in the prospect, and



LOADING COAL AT GREYMOUTH.

the ear is regaled with the songs of English birds from the hedge-rows. Or the walk up Zig-zag Hill may be prolonged to the Cemetery, two miles out of town. Church Hill, not far from Trafalgar Square, is also worth a visit. A few miles to the eastward lies the village



THE INCLINE NEAR WESTPORT.

of Whakapuaka, where the Australian cable touches dry land. The chief townships of the province are Richmond, in the agricultural district of Waimea, and eight miles south-west of Nelson; Motueka, in the district of the same name on the western side of Blind Bay; Collingwood, at the mouth of the Aorere River, in the north-east corner of Golden Bay; and Charleston, Reefton and Westport, in rich mineral country on the west coast. The Amuri is a valuable pastoral district on the borders of the province of Canterbury.

Nelson's only railway is the short line of twenty-two miles which terminates at Bellgrove, the first stage on the overland route to the west coast. The intervening country has a charming aspect, and the little townships of Stoke and Richmond are particularly interesting. Taking the coach at Bellgrove, we gradually ascend the Spooner Range, and from the summit obtain a magnificent view of the surrounding country. Looking back, the delightful valley of the Waimea lies stretched out beneath, and far away beyond run the Port Hills, completely hiding Nelson from view, while more remote still the eye rests upon the broad and placid bosom of Blind Bay, with the French Pass clearly discernible near the verge of the extensive horizon. To the left, the mountains of Collingwood, Takaka and Motueka raise their rugged sides and bold peaks to heaven. Immediately in front, and extending away to the foot of another range, lies the fertile valley of the Motueka, watered by the river of the same name. Descending the range, and crossing the Motueka, a run of eighteen miles takes us to the foot of Hope Saddle, up one side of which and down the other the road winds about in the most devious and fantastic manner, while the incidental scenery is wild and picturesque enough to keep the attention of the traveller fully engrossed. Ten miles farther on the Hope River is crossed, and thence it is but six miles to the comfortable hostelry known as the Hope Junction Hotel. Here acquaintance is made with the Buller, one of the largest rivers in the South Island, but at this point of rather limited extent, seeing that it takes its rise in Lakes Rotoiti and Rotoroa, only twelve miles distant.

The Hope Junction is the half-way house between Nelson and Lyell. Thence the road leads over an undulating country, crossed by beautiful little creeks, dotted with clumps of bush resonant with the songs of birds, and marked by the sites of old camping-grounds, past the Owen, a tributary of the Buller, over the Buller itself at Long Ford, and so on to Fern Flat, which no longer possesses the characteristics that suggested its name, the ferns having disappeared before the progress of cultivation. It is eighteen miles from Fern Flat to the Lyell, and the latter part of the journey is extremely interesting, for the road here follows the course of the Buller, surging fiercely on its rapid and impetuous course to the ocean. The country is wild and mountainous, and the river scenery is enhanced at one point by a majestic cascade one hundred and fifty feet high. The mining township of Lyell stands just at the point of junction of the Buller River with the Lyell Creek, and it is the centre of an active quartz-mining and agricultural district. Thirty-eight miles west of Lyell, and on the margin of the sea, is situated Westport, an important coaling town which possesses far and away the best natural harbour on the west coast. The trip thither should be taken, if only for the sake of the romantic scenery. Eighteen miles out of Lyell, a sharp bend of the River round a jutting flank of the mountain, whose precipitous face is indented by a narrow shelf of roadway, ushers us into the presence of the "Hawk's Crag," and a feeling of awe pervades us as we gaze upward at the frowning mass of towering rock above our head, and then downward, to where, some sixty feet below, the Buller bowls along with tremendous velocity towards its rest in the ocean. Passing "The Crag," the Buller Gorge is entered, and emerging thence the route lies amid milder surroundings. Westport is the place of export for the practically inexhaustible coal-fields of Mount Rochfort, which cover an area of some thirty or forty miles northward of the town.

A line of railway eighteen miles long connects the Port with Waimangaroa and Ngakawhau, where the collieries are in full work. The mineral at the former place is wrought at a height of two thousand feet above the sea-level, and is lowered by means of ingenious self-acting incline tram-ways. Quite a small fleet of steamers is engaged in the export trade, for the quality of the coal has won a very high repute. Gold-mining and timber-cutting are also carried on in the district. This trip to Westport, however, is a divergence from the route which follows the course of the Inangahua River to Reefton, and thence proceeds by way of the lovely Grey Valley to Greymouth, the Newcastle of New Zealand. A noticeable incident of the coaching trip is the passage



THE TOWN OF GREYMOUTH.

of the Buller by punt at Redman's Bar, just after leaving Lyell. Reefton is situated upon the banks of the Inangahua, forty-eight miles north-east of Greymouth. It was the scene of a remarkable "rush" in 1871, when auriferous quartz-reefs were first discovered in the neighbourhood, and for nine years the "scrip fever" ran its intermittent course, sometimes culminating in periods of wild excitement, and at other times plunging its subjects into corresponding lassitude and depression. Gold, however, is by no means the only mineral that repays systematic enterprise, for coal is found over an area forty miles square, and several mines are at work for the use of the quartz-reducing batteries, and for other local purposes.

WESTLAND AND CANTERBURY.

Greymouth, to which reference has already been made, stands on the sea-coast, on the southern bank of the Grey River, which forms the boundary between the provinces of Nelson and Westland. It is a place of considerable importance, as not only is the surrounding district auriferous, but extensive agricultural settlements have been established in the Grey Valley, while splendid coal is found in large quantities all around it. A line of railway seven miles in length leads directly to the Brunnerton coal-mines, of which there are four in active work, carrying on operations upon a scale of increasing magnitude. The Harbour Board has raised a loan of one hundred and fifty thousand pounds in England, and is engaged upon a scheme of port improvement designed by Sir John

Coode, the effect of which must be to still further develop and stimulate the coal-mining industry, and consequently to facilitate the progress of the town.

A line of tram-way fourteen miles long connects Greymouth with the inland mining township of Kumara, which is situated on a terrace about a mile from the southern side of the Teremakau River, and on the main road between Greymouth and Hokitika. It is a single line, and runs through a well-wooded country; but its most novel and interesting feature is the crossing of the Teremakau River in a cage suspended from

two wire ropes and propelled by a steam engine. The trams from either terminus run to the River's bank, and thence the passengers obtain the unique



THE WIRE TRAM-WAY OVER
THE TEREMAKAU.

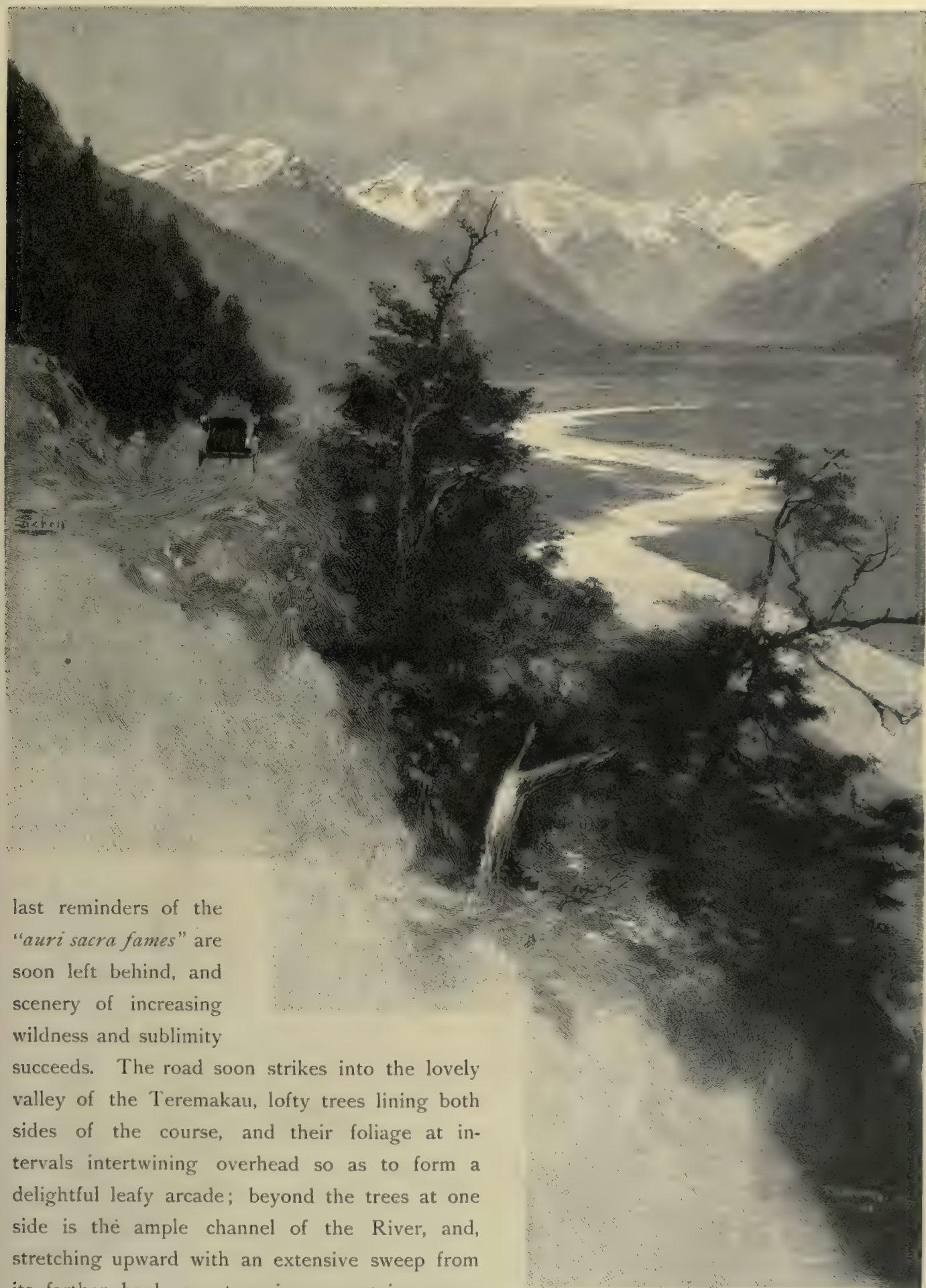
and exciting experience of being whirled in mid-air over the turbid and hurrying flood to the farther shore. Nineteen miles beyond Kumara lies Hokitika, the capital of the province of Westland, and the principal town on the west coast of the South Island.



THE TRAM-WAY BETWEEN GREYMOOUTH AND KUMARA.

It is built at the mouth of the Hokitika River, and was the scene of an extraordinary "rush" from Australia, when rich discoveries of gold, in 1865, produced a fever of excitement which recalled the palmy days of Bendigo and Ballarat. The gold has all been worked out, but Hokitika still lives and progresses. It is well planned and substantially built, and possesses all the institutions common to places of its size and importance. Lakes Kanieri and Mahinapua are situated in the immediate neighbourhood, and will richly repay a visit.

The route, however, lies to the east, overland to Christchurch. The trip is made by coach along a good road for a few miles, then across the Arahura River by an ample bridge, and for the next ten miles or so through a mining district, until Kumara is again reached. On again the coach hurries, under great flumes, past tail-races, sluice-boxes, sludge-channels, and all the other evidences of the restless quest for gold. The



last reminders of the "*auri sacra fames*" are soon left behind, and scenery of increasing wildness and sublimity

succeeds. The road soon strikes into the lovely valley of the Teremakau, lofty trees lining both sides of the course, and their foliage at intervals intertwining overhead so as to form a delightful leafy arcade; beyond the trees at one side is the ample channel of the River, and, stretching upward with an extensive sweep from its farther bank, are towering mountain ranges heavily crowned with snow. It is a run of twenty-three miles from the Taipo Hotel to the celebrated Otira Gorge, and as the end of this stage is neared the level road skirts the Otira River, with sky-piercing mountains on

THE TERRACE OF THE BEALEY.

both sides, densely-wooded to their very brows, and with fleecy streamlets coursing down their rugged and impressive fronts.

Of this wonderful Gorge the Rev. Charles Clark has said:—"I cannot pretend to describe in detail this glorious region. It lives in my memory as a succession of forests, mountains, lakes and water-falls, as brilliant and fascinating as the most vivid fancy could depict, or the most exacting eye desire. There were bold hills covered with luxuriant foliage, the rich trees waving in the transparent air, backed by the white summits of still loftier ranges, upon whose surface, now delicate and lovely, now monstrous or grotesque, the changeful light wrought itself in a magical variety of contrasted colours; deep solitary ravines, walled in by precipitous cliffs devoid of verdure, and overhanging the dark swift streams that swirl about their bases, dismal to the eye and oppressive to the heart; miles upon miles of road, smooth and well-kept as the avenues of an English park, running through the dense undergrowth of stately fern-trees and an endless variety of blooming creepers, that, intertwining each with other, formed an impenetrable jungle. The trunks and even the loftiest branches of the huge trees were coated with moss and hung with ferns, and looked like bearded Druids, some clasped in the writhing coils of dark-stemmed *rata* vines, and yielding slowly to the insidious parasites which sap their vitals, while they make gay the surfaces of their life. There were hundreds of delicious chimes, any one of which would make the fortune of its owner could it be transferred to Devonshire or the Isle of Wight; nooks where the sunshine steals in and goes to sleep and the winds breathe in soft whispers, festooned with trailing ferns and carpeted with fairy mosses, and overhung with dripping boughs that catch a brighter green from the translucent water that from a shelf of rock five hundred feet above comes leaping, sparkling, dancing, gurgling, dashing, and performing all the antics with which Southey credits the waters that come down the Lodore. This is the finest cascade in the Gorge, and is supplied by an Alpine lake lying three thousand feet above the sea, and called the 'Devil's Punchbowl.'"

At the summit of the Gorge stands the stake that marks the boundary line between the provinces of Canterbury and Westland. Down the deep descent of Arthur's Pass the tourist proceeds until, at a point more than a thousand feet lower than the head of the Gorge, he reaches comparatively level ground again, strikes thence across the shingly bed of the Bealey, plunges into the bush, crosses the Waimakariri near its source, follows its course for some distance as it winds about amid romantic mountain scenery, and then finishes this stage at the Bealey.

The last stage of the passage over the mountain ends at Porter's Pass, the top of which is crowned by a telegraph post, the highest in the colony, and the Rev. Charles Clark, who approached it from the Christchurch, or eastern side, thus graphically describes what he saw:—"Steadily for an hour we climbed up the Pass, down which the coach bowls on its return journey in ten minutes, the road a mere shelf scooped out of the hill-side, and zig-zagging on the brink of the precipice in a highly picturesque and nervous fashion. . . . We were now fairly among the mountains, the road as it wound among the foot-hills seeming to be blocked up at every turn by the heights that appeared to crowd together for the purpose of gazing at us over one another's shoulders. Late in the afternoon we opened on a broad sunny valley, and saw on a distant hill-



THE OTIRA GORGE.

side an assemblage of rocks, some grouped like the buildings of a Cyclopean city deserted by its founders, some standing alone, stern and grim like sentries petrified at their posts; others again looking like the tombs of a colossal grave-yard, or the circling seats of a vast amphitheatre; and farther still huge groups and solitary masses like the gigantic monoliths of Stonehenge."

The forty-four miles remaining to be traversed, namely, from Springfield to Christchurch, is compassed by train. At the township of Springfield, just beyond the Pass, the coach is exchanged for the train, which at Rolleston Junction joins the main trunk-



PORTER'S PASS, ON THE WEST COAST ROAD.

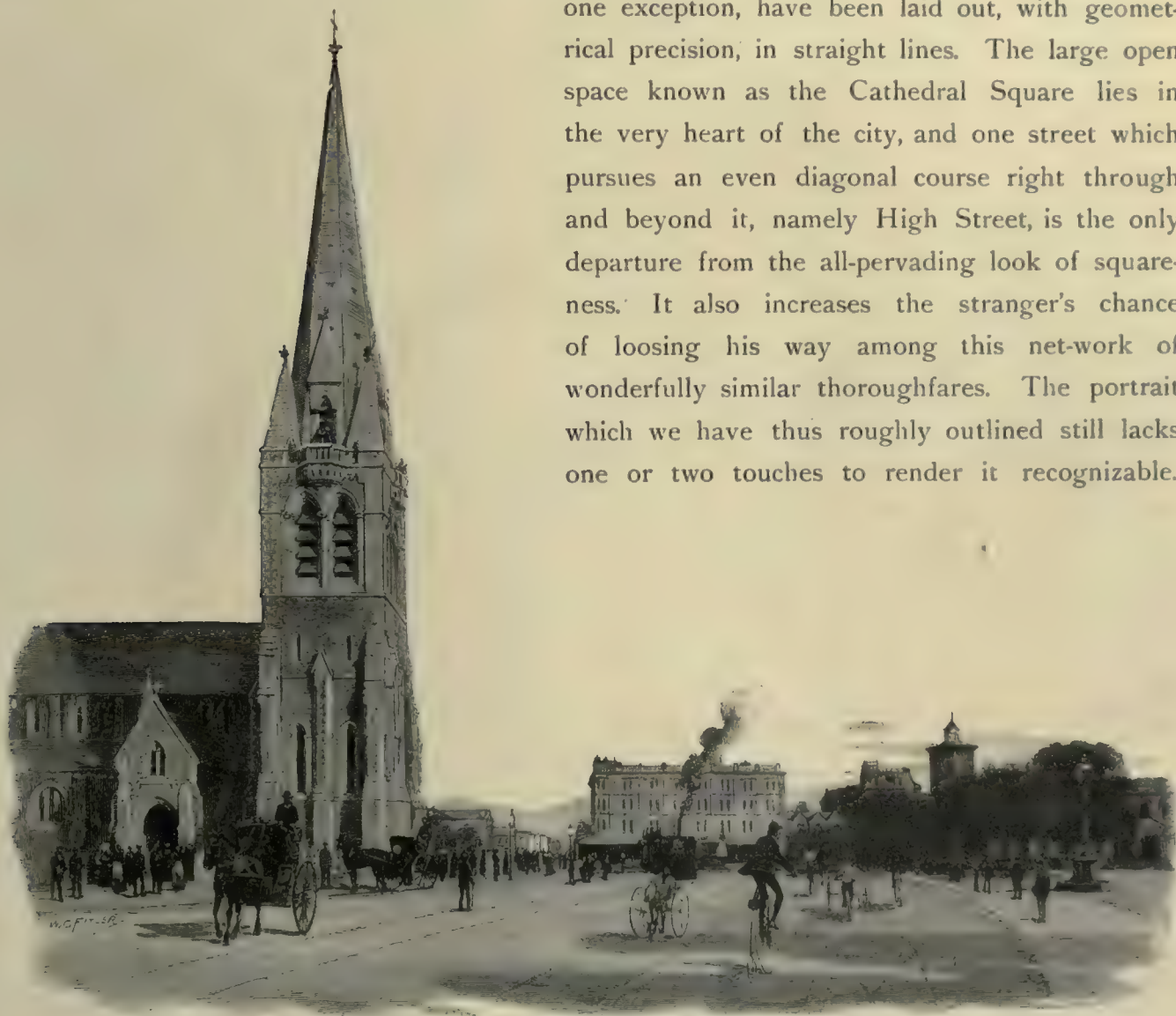
line extending from Dunedin to the capital of Canterbury. From the Junction, the railway line branches off across the level country in the midst of which the capital city of the province is situated. The course is now over far-extending plains, that roll away to the horizon on all sides in unbroken undulations whose continuity is broken only by the far-away sky-line. From the windows of the railway carriage the traveller's eye is refreshed as he speeds along by the comfortable and thoroughly characteristic English scenery which this part of the older settled districts presents. Retired little hamlets, plantations of trees, broad meadows, fields of waving corn, rich orchards, increasing and multiplying evidences of population, enterprise and industry seem to course after one another in rapid succession as the traveller sweeps

by, until he finds himself within the suburbs of an important industrial, commercial and social centre, and inside the precincts of "The City of the Plains."

CHRISTCHURCH.

Two features at once arrest the attention of the travelled visitor. The first is the thoroughly English look of the place. In the outskirts are clumps of exotic trees, pleasant hedge-rows, charming country lanes, neat cottages with plots of garden, and cultivated farms; within the city limits—which, by the way, are belted with trees—churches and schools that look just as if they had been lifted bodily out of some English town and quietly dropped down here along with their Old World surroundings. Nothing is here to suggest pronounced colonial peculiarities. The other striking feature is the symmetry of the plan of the city, and this fact at once reminds us that Christchurch is the creation of a single generation—that it is essentially modern; and that if we succeed in tracing many English resemblances, we fail at the same time to note any servile imitations. The city is rather more than a mile square, and the streets, with

one exception, have been laid out, with geometrical precision, in straight lines. The large open space known as the Cathedral Square lies in the very heart of the city, and one street which pursues an even diagonal course right through and beyond it, namely High Street, is the only departure from the all-pervading look of squareness. It also increases the stranger's chance of losing his way among this net-work of wonderfully similar thoroughfares. The portrait which we have thus roughly outlined still lacks one or two touches to render it recognizable.

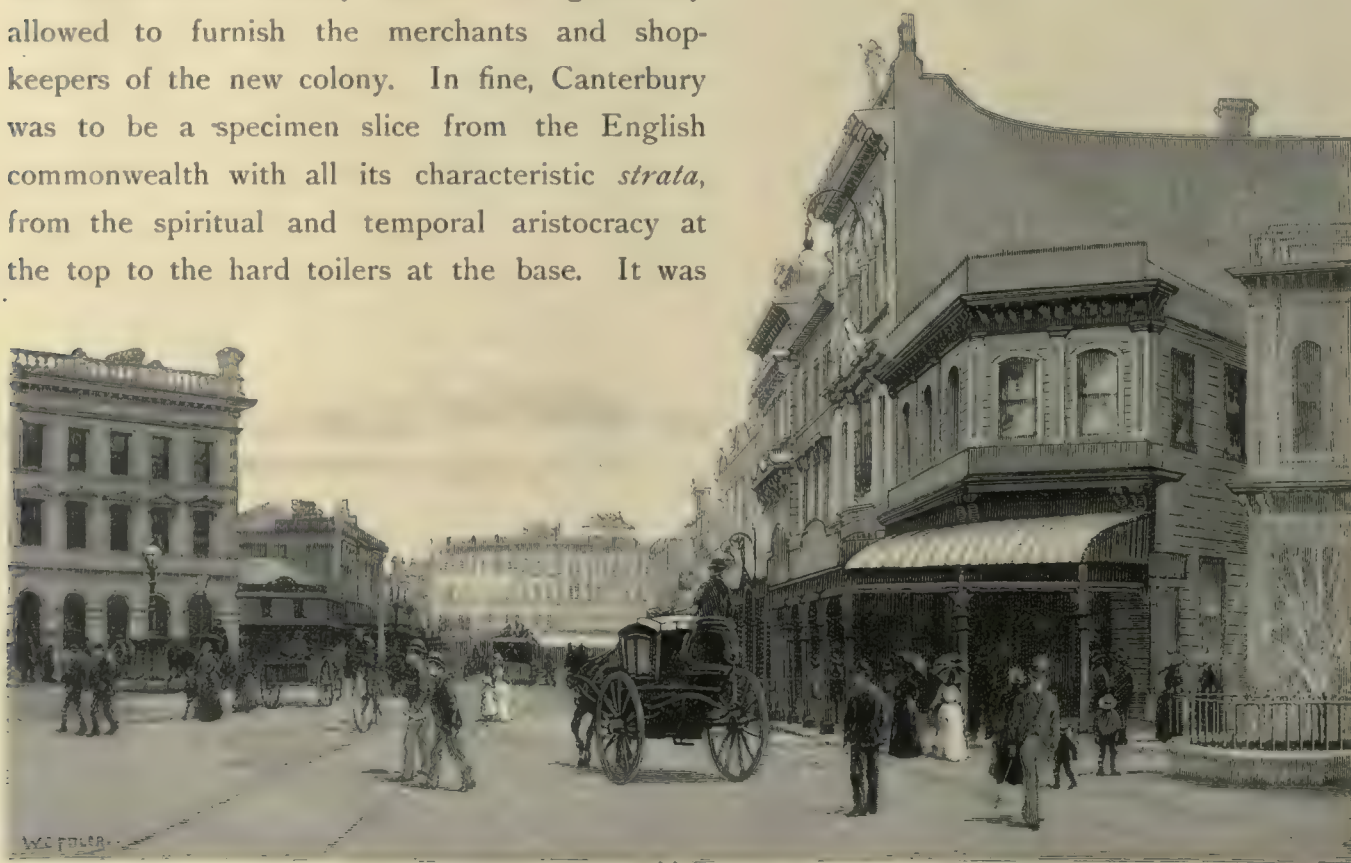


THE CATHEDRAL SQUARE, CHRISTCHURCH.

It would be unpardonable to forget the River Avon in a description of Christchurch. It is a comparatively shallow stream of pellucid water, which meanders in tranquil smoothness through the city between low banks fringed with weeping willows, and under bridges

which are both an ornament to the place and a picturesque feature in the landscape. Nor can we overlook the fine plantation of trees which engirdles the city proper and constitutes what is known as the Town Belt. It proclaims both the wisdom and the appreciation of the beautiful in nature and art which possessed those who were privileged to lay the original foundations of this flourishing seat of industry.

And this reflection at once starts the mind upon a consideration of the strange and romantic genesis of "The Cathedral City." It was intended to be a very exclusive place—a kind of poetic Arcadia for the younger sons of the English nobility, where, under the benediction of the Established Church, they were to preside over large landed estates, to be farmed by a grateful yeomanry who should look up to them with feudal submissiveness. The Anglican Church was to have supreme dominion over spiritual affairs, and middle-class society was to be graciously allowed to furnish the merchants and shopkeepers of the new colony. In fine, Canterbury was to be a specimen slice from the English commonwealth with all its characteristic *strata*, from the spiritual and temporal aristocracy at the top to the hard toilers at the base. It was



HIGH STREET, CHRISTCHURCH.

a very pretty scheme on paper for those who designed it, but it was foreign to the democratic genius of Anglo-Saxon colonization, and was therefore quietly discarded, when the settlers came to realize the impossibility of setting up, in their new home, the kind of *imperium in imperio* which the promoters of the enterprise had contemplated. But traces of the original leaven are still to be met with in Christchurch. Its "society" is said to be more exclusive than elsewhere, and tries to conform itself to old-fashioned predilections for caste distinctions; the possession of a cathedral having its dean and chapter, in addition to a bishop who is recognized as the Primate of the colony, keeps alive a decided flavouring of High Churchism; and finally the streets retain the nomenclature which they derive from Anglican bishoprics throughout the world—Hereford, Cashel, Lichfield, Durham, Gloucester, St. Albans, Tuam, Armagh, Montreal, Colombo, Madras, Antigua, Barbadoes, and so on. The "Canterbury Pilgrims," as the first settlers termed them—

selves, did an heroic work in carving out of the wilderness so fine a city and province. Let it be remembered that these pioneers landed at Lyttelton in December, 1850, and that therefore all we now see is the work of less than forty years, and we obtain an estimate of labours which can hardly be too highly extolled.

So much for the past. Let us proceed to examine the present which it has evolved. Alighting from the train, the visitor steps on the broad flagged pavement of the finest railway station in New Zealand. It is built of brick, with white facings, and has certainly a very pretentious appearance. Across the ample width of the well-formed



GLOUCESTER STREET, CHRISTCHURCH.

roadway from the Station stands a spacious family hotel, and in the intermediate distance there is a group of neat-looking cabs. There are also steam-trams in waiting, offering a cheap ride through the city to Sydenham or to Papanui, and as far as Heathcote Bridge on the road to Sumner. The streets are broad and capitally macadamized, the footpaths are trim and clean, and the deep concreted dish-channels on their sides indicate an efficient system of drainage. Another feature particularly pleasing to the eye is the presence of trees. As for the buildings, although Christchurch is not nearly so advanced in the age of brick and stone as Auckland, still wood does not predominate to any appreciable degree. In Colombo Street, High Street and Hereford Street, we pass some stately edifices that would grace any metropolis. As, however, these recognized avenues of business are reached, we begin to weary of the monotony of the dead level of the site of the city, and to long for an eminence which will afford something like a comprehensive survey of the place. Fortunately, art to a moderate extent supplies the want which nature has ignored. In other words, the tower of the Cathedral, two hundred and ten feet high, is the only real coign of vantage from which to view the capital of Canterbury.

This is the finest ecclesiastical structure in the colony, and its site has been well chosen. It occupies the centre of a large public square in the very heart of the city,

and certainly graces it withal. The corner-stone was laid in December, 1864, and for more than twenty years the work of construction progressed at a fitful rate. At times the community looked upon it as a work never destined to be completed, and it used to be derisively said that one man and two boys were kept employed upon it merely to rub the moss off the stones. The project has survived the shafts of sarcasm, and the Cathedral now stands as an enduring monument of the pluck, zeal, and religious fervour of the "Canterbury Pilgrims." The style of architecture is Norman, and the



VICTORIA BRIDGE, AND THE SUPREME COURT.

edifice is stated to be a copy of the Caen Cathedral in Frankish Normandy. The handsome spire springs from a square tower, and carries a plain cross at its apex, while the tower contains a peal of ten bells. The building boasts a fine mosaic pavement, and the choral portion of the services is excellently performed by a highly-trained and efficient male choir.

On the opposite side of the Square stands, within a railed enclosure, the statue of John Robert Godley, first agent of the Canterbury Association and virtual founder of the city, and at its side the Post and Telegraph Offices, a large two-storey structure of brick, with white stone facings, and with a square clock-tower over the main entrance. The statue, it may be mentioned, was executed by Woolner, and is a capital likeness of the original. To our right, the spacious printing establishment of the *Lyttelton Times* newspaper attracts notice, and away to the left lie the busy commercial centres of High, Hereford and Cashel Streets. On every side the streets strike off at regular intervals to the Town Belt, with its poplar and other trees, and then we gradually lose sight of them in a green perspective of more trees and gardens. Crossing Colombo Street from the Cathedral, a short walk down Worcester Street, which strikes off at right angles from it, brings the visitor to the near bank of the Avon, across which stream a handsome bluestone bridge springs in a single span, and leads direct to the Museum on the other side of the road.

Keeping, however, on the Cathedral side of the River, its banks are skirted past Armagh Street, until Gloucester Street is reached, where the splendid new bridge carries the thoroughfare over the rippling stream. Holding on his way, the traveller next arrives at the intersection of Victoria Street, and passes over to the opposite bank by the substantial Victoria Bridge, constructed, like the others, of bluestone, and its sides closed in with neat iron railings. Across the road from it stands the Supreme Court, approached by a line of two or three steps, whence one may pass under low archways

into the Court itself. To the right the eye rests upon a low, grim and castellated building, flying a flag from its corner tower, and closer examination shows us that it is the Barracks of the Salvation Army. To the left-hand lie some of the scholastic buildings with which the city is amply furnished. In no other respect have the pioneers more convincingly attested their wisdom and foresight than in the splendid provision they made for secondary and higher education. At a time when the Provincial Government was in receipt of a princely revenue from its land fund, and when the settlers of the North Island had to struggle on as best they could without any such wealth, no less than three hundred and fifty thousand acres were set apart in this favoured province as educational endowments, while in 1873 fourteen thousand pounds were voted for the erection of a Normal School where teachers might be properly trained. The Canterbury College, which now stands in Worcester Street, at the western end of the city, is affiliated to the University of New Zealand, and boasts a long list of graduates. It is a building of the Gothic order, with a



THE CATHEDRAL PULPIT.



THE WEST DOOR OF THE CATHEDRAL.

high clock-tower over the main entrance. And the Church of England has not been one whit behindhand in educational enterprise. It established, in the very early days, the still flourishing institution of Christ's College, which is now equipped with a large play-ground, a fives'-court, practice grounds for cricket and football, and an ample swimming-bath. In addition to these seats of learning, there are boys' and girls' high schools, both richly endowed, six or seven State primary schools, and a well-endowed school of arts at the corner of Hereford and Antigua Streets. Nor must the Agricultural College at Lincoln, thirteen miles south of Christchurch, be forgotten. A farm of six hundred acres is attached to it, and lectures are regularly given on agriculture, chemistry,

botany and zoology, mathematics, physics, veterinary science, physical geography, meteorology and other kindred branches of study.

In close contiguity to Canterbury and Christ's Colleges are the Museum and the Botanic Gardens, the main entrance to the latter commanded by a fine statue of the late Mr. W. S. Moorhouse, a popular Superintendent of the province, to whom the Museum, as well as the Lyttelton railway tunnel, owes its origin. But if the enterprising Superintendent conceived and inaugurated the Museum, it was the late Sir Julius von Haast, who, as Curator for the first twenty-five years of its existence, brought it to its



THE STATUE OF JOHN ROBERT GODLEY.

present high state of excellence. In its technological department it has, as yet, no rival in the colony. In fact, it is a museum of which both Christchurch and New Zealand at large may justly be proud. The mammal-room is filled with rows of cases containing by far the best collection of specimens of natural history yet formed in the country. The technological-room contains a valuable metallurgical series, and interesting illustrations of the ceramic art, the steel and iron manufactures, engineering, ship-building and textile skill. In the room

devoted to osteology there is a fine grouping of skeletons, including a gorilla, a giant python from India, and articulated human skeletons, besides typical skulls of the various races of the genus *homo*. In addition there are separate rooms for fossils, paintings and plaster-casts of statuary and antiquities, while both geology and ornithology are adequately represented. We have left to the last two specialities of the Museum, namely, the moa-room and the Maori house. In the former stand two splendid specimens of the *dinornis maximus*, twelve feet three inches high, as well as other specimens ranging from the size of a small emu to that of a giraffe. That the moa, although now extinct, existed at one time in very considerable numbers in some districts, may be inferred from the fact that a search expedition, organized by Dr. von Haast in the year 1866, obtained enough bones of this gigantic bird to fill an immense waggon. For a long time—indeed, until within the last few months—it was believed that living specimens of the moa might still be discovered in that almost inaccessible mountainous region on the south-west and western coasts of Otago, where even the Maori, in all probability, never penetrated. The expedition of Mr. Reischek, the Austrian naturalist, who spent several months of the years 1887 and 1888 in that solitary country,

has pretty well dissipated this hope. But Mr. Reischek's researches brought to light two species of bird new to science, and resulted in the discovery of a moderately extensive grass-country among the hills, which was promptly taken up for run-holding purposes. The Maori house was brought from Napier, and was intended for the residence of a chief. It contains a fine collection of Maori curios, amongst them casts of an antique *Tamil* bell, found in the possession of the North Island natives, and of *Koratangi*, a carved stone bird said by the Maoris to have been brought with them from Hawaiki.

The Public Gardens, or Government Domain, lie alongside the Museum and cover a tract of eighty acres, picturesquely laid out and almost surrounded by the sinuous Avon with its drooping willows. Among the earliest contributors whose interest in the Botanic Gardens and Museum was enlisted by Dr. von Haast were Baron von Müller, of Melbourne, who sent a collection of four hundred and sixty specimens of Australian plants, and Professor Louis Agassiz, to whom the Museum is indebted for large collections of the skins of North American mammals and a number of interesting fossils.



THE HIGH SCHOOL, CHRISTCHURCH.

Across the Avon, and to the north and south of the Public Gardens, extends Hagley Park, a reserve of four hundred acres, which was presented to the people of Canterbury by a number of English well-wishers. It is environed by belts of English trees and Californian pines, while the numerous shady walks make up a total promenade of ten miles. At the southern end there are spacious cricket grounds, and the portion of it which adjoins the Hospital has been formed into Acclimatization Gardens. To row up the River by the side of Hagley Park is a delightful experience, and the time may be agreeably varied by angling for some of the splendid trout that disport themselves in the clear stream. But the trout have by no means a monopoly of the running water; it is also populated by shoals of white-bait. The principal arena for cricket and foot-ball is at Lancaster Park, a fine reserve of eleven acres, admirably laid out and furnished with the necessary buildings. Christchurch has always enjoyed considerable repute for its prowess in the cricket field. The chief sporting institution of the place is the Canterbury Jockey Club, which possesses a race-course reserve of rather more than three hundred acres at Riccarton, about ten miles by rail from the city. Racing found a congenial home in Canterbury from the earliest days of the settlement, and the "added money" offered by the Jockey Club has steadily increased from year to year. The principal events are the "New Zealand Cup" of one thousand sovereigns, and

the "Derby" of seven hundred and fifty sovereigns. "Cup Day," if not such a grand affair as the great event of "Carnival Week" at Melbourne, evokes quite as much interest in the Christchurch world of fashion, and the array of brilliantly attired beauty which Canterbury can furnish forth on a gala occasion is not to be despised even by those who measure every display of the sort by the Flemington standard. There are three theatres in the place, and an equal number of public halls, while social, athletic and volunteer organizations are as numerous and flourishing here as elsewhere. A private gas company contracts for the lighting of the city, and the water-supply is

derived from an excellent system of artesian wells. Drainage has been one of the most serious difficulties with which the people have had to cope, and it has been found necessary to maintain a drainage board to give it undivided attention.

Christchurch is a recognized seat of industrial activity. It possesses flour-mills, foundries, implement manufactories, boot, carpet and carriage factories, brass and copper works, breweries, potteries, pickle, sauce and jam works, fellmongeries, tanneries and biscuit factories, besides a woollen factory and glass-works at Kaiapoi, fourteen miles north of Christchurch by rail. The Kaiapoi Woollen Company has a capital of one hundred thousand pounds; and, besides a staff of two hundred and fifty at the mill, it employs upwards of four hundred and fifty persons in its clothing factory. The cloth pro-



SKELETONS OF A MOA AND A MAORI.

duced at the mill, among prizes innumerable, counts a gold medal won at the Sydney Centennial Exhibition in 1888. The tweeds, blankets, rugs, shawls and hosiery produced at Kaiapoi are not excelled anywhere. In engineering establishments Christchurch is not a whit behind the other chief cities of New Zealand, and one local firm, that of Messrs. Scott Brothers, has lately achieved the distinction of manufacturing the first ten locomotives constructed in the colony. Their works cover about an acre of land in Manchester Street, and the firm have an auxiliary establishment in the vicinity of the Lyttelton Graving Dock. As might be supposed, Christchurch being the centre of the richest agricultural territory in New Zealand, the business of pork-packing is carried on there upon an extensive scale. One establishment, that of Mr. T. H. Green, disposes of between seven thousand and eight thousand pigs every season, and possesses facilities for dealing with one thousand pigs at one time. In the various departments of trade connected with grain and wool, Canterbury takes the lead in New Zealand. It must also not be forgotten that to Christchurch enterprise, in the first instance, the colony owed that magnificent commercial venture, the New Zealand Shipping Company, which has done so much to improve the carrying trade of the colony, although it has not proved a profitable investment for the share-holders. The rapid dispatch furnished by

this line, combined with the great commercial advantages conferred by the service, led Parliament, in 1888, to decide that a fortnightly service by direct steamer would satisfy all the mail requirements of the colony. A return laid before the House shewed that



A REACH ON THE RIVER AVON.

the steamers in 1887 brought to the colony two thousand five hundred and forty-eight passengers, with ten thousand six hundred and eighty-seven tons of cargo by weight,

and took away exports comprising every description of New Zealand produce—wool, skins, leather, wheat, grass-seed, fruit, flax, and other goods, and two hundred and five thousand six hundred and eighty-four carcasses of mutton, seven thousand two hundred and eighty-nine legs of mutton, and nineteen thousand and eighty-nine cases of meat. They also purchased in the colony large supplies of coal. It is no wonder, under such circumstances, that the colonists consider it to be to their interest to support this enterprise. It was arranged that the fortnightly service should be carried on conjointly with the steamers of the Shaw, Savill and Albion Line, which now contributes in equal measure with the



THE CHRISTCHURCH MUSEUM.

New Zealand Shipping Company to foster the trade of the colony. Four daily papers—two morning and two evening—and a number of weeklies represent the fourth estate. Sumner and New Brighton are very popular sea-side resorts, and at Sumner is also located the Colonial Institution for the Deaf and Dumb. It is a charming little watering-place, full of

attractions for holiday-making and vacation-spending folk from Lyttelton and elsewhere. One of the sights of Sumner is a striking natural feature known to local sight-seers' fame as "The Cave Rock." It is a great mass of heaped-up crag that juts out from the sandy beach, crowned by a signal-mast on the seaward side. Just beneath this flag-staff is a large aperture hollowed out by the immemorial action of the sea.

Returning to the city, and taking the train to Lyttelton, eight miles distant, the traveller is enabled to visit the chief port of the province. The last stage of the trip is through the tunnel that pierces the lofty hills between city and port, and commemorates the spirit and enterprise of the late Mr. Moorhouse. It is two thousand eight hundred and seventy yards long, cost one hundred and ninety-five thousand pounds in construction, and is still the largest engineering work of the kind in New Zealand. Lyttelton, as a town, can never be very large or extensive, owing to the formation of the surrounding country. It is situated within the bight of a range of bleak, sombre and lofty hills, ranged in the shape of a horse-shoe, the sides in most instances descending in a steep and continuous slope to the water's edge, and the bight itself sloping more gradually upwards from a contracted area of comparatively level land. It was over the face of one of these bleak and barren hills that travellers who had occasion to visit Christchurch in the early days were compelled laboriously to climb. The entire extent of the fore-shore is bounded by a wooden breastwork, from which wharves



ASCENT OF HOCHSTETTER DOME.

and jetties, constructed of the same material, stretch out at right angles; and at either extremity of the breastwork spring the substantial rubble-stone piers of the breakwater that hold within their secure embrace all the shipping of the place. Long lines of galvanized-iron sheds lie within the breastwork, and on both sides of them, and down the full extent of the wharves, run lines of iron rails pretty well covered with railway trucks. So ample is the shed-accommodation of the Port that two of the largest will alone hold eleven thousand tons of grain. Immediately beyond the sheds is situated the business portion of the town, durably built of stone or brick, its buildings being of an average height of two storeys. On the slopes of the hills, to the sides and at the back, are dotted far in all directions widely scattered villas and dwellings more or less picturesque and pretentious.

The harbour, originally called Port Cooper, has had more money spent upon it to ensure perfect security for shipping and to provide maritime facilities and conveniences than any other sea-port of the colony. The harbour works were projected so far back as 1863, and about half a million of money has been spent upon them. The two arms of the encircling breakwater, formed of rubble-stone faced on the outer slopes with huge blocks, and extending respectively from Officer's Point and Naval Point, enclose a water area of about one hundred and seven acres, the depth



THE STATUE OF SUPERINTENDENT MOORHOUSE.

of water ranging from nineteen up to twenty-five feet at low-tides. The arm extending from Officers' Point is two thousand and ten feet long, forty feet wide on the top, elevated six feet above high-water spring-tides, with a timber breastwork extending along its inner face for nearly its whole length. The other arm is one thousand four hundred and thirty-four feet long. Within this inner harbour the berthage space is computed at upwards of eleven thousand feet, and will accommodate without trouble twenty-two ocean ships and steamers, twenty barques and brigs, eight intercolonial steamers, and thirty schooners and smaller craft.

The wharves vary in length from one hundred and sixteen to one thousand three hundred and eighteen feet, the latter being the measurement of the Gladstone Wharf. The Graving Dock is a most important and useful addition to the harbour works; in capacity it is second only to that of Auckland. Its dimensions are: length on floor, four hundred and fifty feet; width on floor, forty-six feet; width of entrance, sixty-two feet; depth on sill at high-water, twenty-three feet. The total cost, including pumping

machinery and caisson, was one hundred and four thousand pounds. In addition there is a patent slip capable of taking on vessels of four hundred tons burthen. The wharves are lit up at night with the electric light. Lyttelton also has its fortifications, and would not be found defenceless in time of war. In accordance with the general scheme of naval defence drawn up for the colony, batteries have been constructed on the heights commanding the entrance to the harbour, and any hostile cruiser would find it a risky experiment to run the blockade even under the cover of night, for here, as at Auckland and Wellington, the batteries have been furnished with powerful electric search-lights. The chief public institutions are the Sailor's Home and the Orphanage. A coach-road, carved out of the face and over the flank of the steep hill on the northern side of the town, leads past the Observatory, and by way of the pleasant watering-place of Sumner to Christchurch. It is called the Zig-zag, and affords the stranger a capital view of the harbour and its quarantine station on Ripa Islet. At one time it was the only means of communication for vehicles with the capital city of the province, but that time lives now only in the remembrance of the oldest inhabitants, who will also recollect that Lyttelton was originally designed to be the metropolis of Canterbury.

THE SOUTHERN ALPS.

We must now trace the route to the south over the Canterbury Plains. It lies through a practically treeless country, coursed by rapid mountain torrents and streams which almost dry up during the summer and autumn months, the Pacific lying on our left-hand laving the low cliffs that border the Ninety-mile Beach, while away to our right stretch the long extent of the Southern Alps, softened in outline by the blue haze of distance, and with the snowy caps of their higher peaks glittering in the brilliant sunshine. A run of rather more than a couple of hours brings the train to Ashburton, fifty-three miles south of Christchurch, the first township of any note on the southward journey. It is built of wood, and has a frontage to the eastern side of the line. It is a considerable town, and plantations of poplars and blue-gums greatly enhance its appearance. A little more than twenty years ago, Ashburton was only a bullock-teamster's camp, boasting merely a rude public-house, a blacksmith's shop and a police hut. Now it is a gas-lit town, with spacious streets lined by shops, public buildings, hotels, churches, schools, a theatre and a public library; the public health and convenience have been judiciously provided for by the dedication of pleasant reserves and wooded parks, while tall chimney-stacks proclaim it the seat of numerous industries.

On still, over these shingly plains with their scant herbage of tussock-grass, and their bountiful evidences of agricultural enterprise, the traveller passes every five miles or so small stations furnished with the granaries and stores of that ubiquitous corporation, the New Zealand Loan and Mercantile Agency Company. At Temuka, we reach the Station through a plantation of trees, whose waving branches and pleasant verdure form an agreeable relief from the monotony of timberless country. This is eighty-nine miles from Christchurch, and eleven miles farther on is Timaru, the second town of Canterbury, and nearly half way to Dunedin. Timaru is solidly built of a dark bluestone, taken from quarries in the neighbourhood, and the presence of trees within the limits

of the town, and of standing bush in the outskirts, gratefully salutes the eye. A glance at the port suffices to indicate that scientific skill, backed by colonial enterprise, has



THE TOWN AND PORT OF LYTTELTON.

transformed a dangerous roadstead into a comparatively safe haven. The strand was formed of shifting shingle, upon which the surf broke with great violence when the

wind blew in from the sea, and, as a consequence, landing under such circumstances was a perilous feat, while shipping was exposed to great danger. In fact, two English ships were wrecked on the beach with loss of life so recently as 1882. Since then a powerful breakwater has been constructed at a cost of something like two hundred

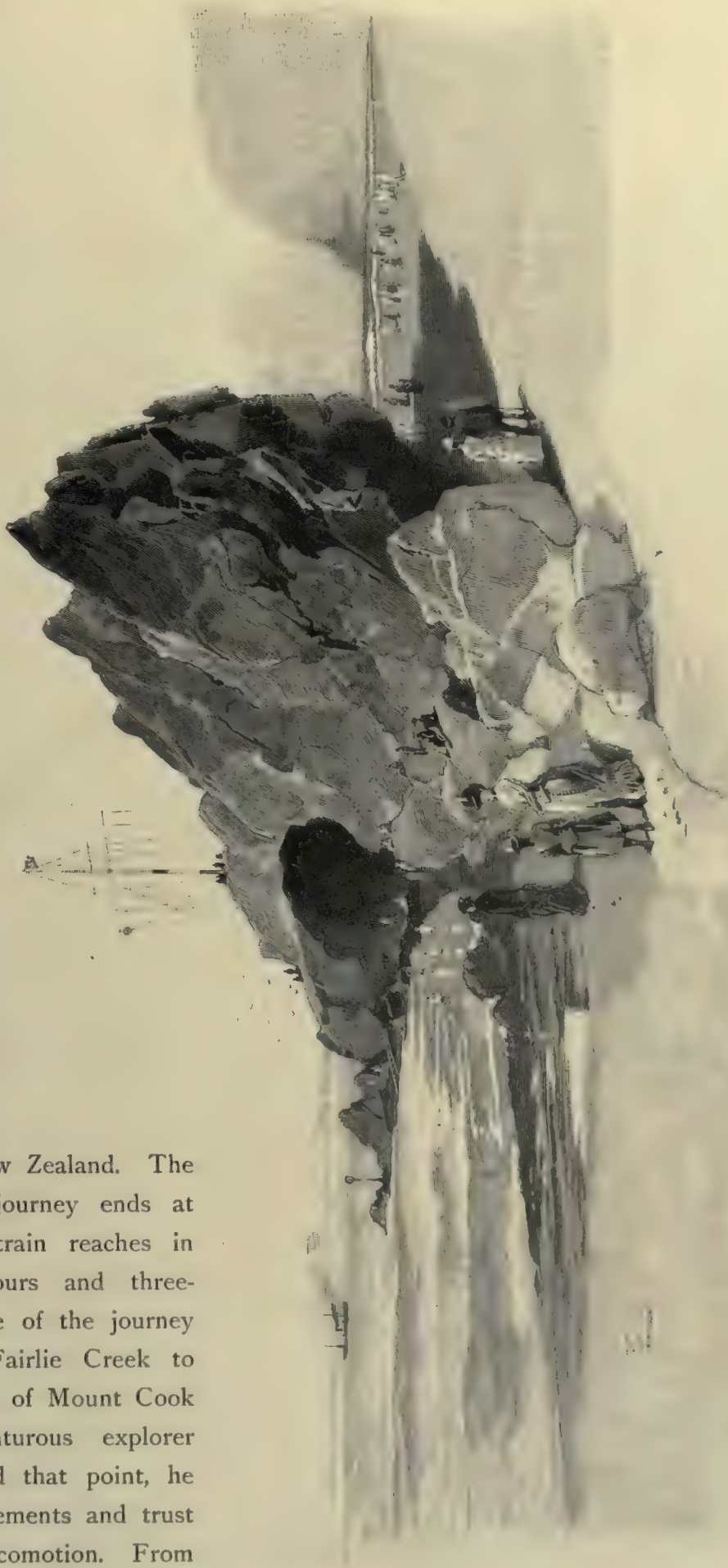


THE BREAKWATER AT TIMARU.

thousand pounds. Immense wooden tanks were formed on the beach, and filled with cement and shingle which solidified into Titanic blocks of concrete, some of them weighing as much as thirty tons each. These were then carried seaward by a gigantic travelling crane, and placed in their required positions, until they united to form a solid breakwater of concrete blocks thirty-six feet wide, reaching to half-tide in height, and capped with a monolithic concrete block of about five hundred tons in weight. This wall has been pushed seaward some sixteen hundred feet, and at that distance takes a cant to the north and extends four hundred feet farther. It is also proposed to build a mole from the shore on the north, towards the extremity of the cant, so as to produce a near approximation to a perfectly enclosed harbour. At present vessels of a thousand tons can anchor in safety under the lee of the breakwater, and even with a heavy sea running can come alongside the wharf to load or unload. The buildings of Timaru are substantial, if not strikingly handsome, and

some of them are of considerable proportions. All the various religious denominations possess well-built places of worship, while the chief places of amusement and of public assembly are the Theatre Royal, two Oddfellows' Halls, a Foresters' Hall, a Mechanics' Institute, a Garrison Hall and Assembly Rooms. In addition to the Government buildings and Town Council Chambers, there are also a hospital and a high school, besides the primary schools and a Roman Catholic convent. The wind-mill constitutes a notable feature of the landscape, and from this latter point may be obtained a good view of the town. Timaru is favourably situated for a Canterbury town, inasmuch as it is set in the midst of a billowy expanse of gently undulating plain, and any departure from the prevailing dead level, however slight, is very welcome.

The remarkable gorge of Burke's Pass lying directly behind the town, but at a considerable distance from it, indicates the route to be followed in order to make closer acquaintance with the high Alps of New Zealand. The first forty miles of the journey ends at Fairlie Creek, which the train reaches in rather less than two hours and three-quarters. The second stage of the journey extends by coach from Fairlie Creek to the Hermitage at the base of Mount Cook itself, and, if the adventurous explorer wishes to penetrate beyond that point, he must make his own arrangements and trust to his own powers of locomotion. From



THE CAVE ROCK, SUMNER.

the Creek to Lake Tekapo, twenty-six miles, there is an excellent road, and in fine weather the drive is most enjoyable. At the end of the first five or six miles is Silver-stream, famed for its trout, and seven miles farther is the township of



TIMARU FROM THE WIND-MILL.

Burke's Pass. It is a stiff pull to the top of the Pass, two thousand five hundred feet high, from which is obtainable a capital survey of the great Mackenzie Plains, so named from a daring outlaw who, from this secure retreat, made regular forays in the early days upon the stations of the more settled country. The Rev. W. S. Green, M.A., who made the ascent of Mount Cook in 1882, says that the vast area now occupied by the

Mackenzie Plains "was once covered by the great glacier-field of the Waitaiki. Afterwards it was filled by a lake, the ancient shores of which form the most complete series of terraces that has ever come under my observation. When at last the waters of the great lake broke through the dams of glacier deposits to the south-eastward, the rivers ploughed deeply into its bed, shifting their channels now and again, and leaving abrupt escarpments of shingle to mark their courses. Now the whole surface is covered with a sparse vegetation, consisting of the various native tussock-grasses, and interspersed with clumps of 'Spaniards,' or sword-grass. On the Plains this latter plant grows short and strong, and presents a most formidable array of spikes, which pierce your flesh like so many daggers, should an unfortunate stumble cause you to fall upon a clump. Vegetation of any sort is so scanty that these Plains can barely support but one or two sheep per acre."

After a slight descent from the Pass, the road takes a sharp bend to the right, and skirts the hills over the upper level of an old lake terrace, till, rounding a hill,

which proves to be a moraine that dams the waters back, Lake Tekapo bursts suddenly into view, its flood glittering in the generous sunshine, and the surrounding hills clearly reflected on its glassy surface. Lofty mountains rise on either hand, and above the lower ranges snow-clad peaks, while far away on the left Mount Sefton raises its towering crest towards the sky. A diminutive islet not far from the shore contains a clump of pine-trees, and in the midst of it the dwelling of a run-holder. Lake Tekapo lies two thousand four hundred and sixty-eight feet above the sea-level, and is about fifteen miles long by about three miles broad. It is formed by the Godley River, which flows into



THE MACKENZIE PLAINS.

it from the north, and the Cass River from the north-west. According to Dr. von Lendenfeldt, "few places on the earth can be found where there is such an accumulation of moraine. Here we find a large moraine from seven to ten miles in breadth, and so high that in many places the rivers do not cut down to the bottom, and do not disclose the geological formation on which it rests. The Tekapo Lake is, like other Alpine lakes, particularly dirty, and looks like milk. The same is the case with smaller lakes of a like description in the European Alps, but it would be hard to find a lake in Europe which is so large as Tekapo, and at the same time so dirty. The reason of this is that these New Zealand lakes are shallow. The Lake of Geneva, though fed in the same way as Tekapo from glaciers, is remarkable for its blue and transparent water; but these lakes in New Zealand are nearly as muddy as the streams which issue

from them and still bear the same character. The suspended particles cannot settle in consequence of the strong currents which prevail." Twelve miles from Tekapo, and on its

south-western side, it is connected by a small stream with a lake of less extent, which has been named Alexandrina, after the Princess of Wales.

A stretch of thirty miles separates Tekapo from Lake Pukaki. At the end of the first six miles, a branch road strikes off at the right to Braemar Station, and thence across the Tasman River to Mount Cook, which was the route taken by the Rev. Mr. Green in his memorable ascent of the "Mont Blanc" of New Zealand. The route, however, lies past Balmoral Station, and thence by a gradual descent to Irishman's Creek, where the first glimpse of Mount Cook is obtained. Holding on this course we cross the Mary Burn, and ascend by a short rise to Simon's Pass, which offers an extensive view of the northern portion of Otago. The road now winds about over old moraine accumulations to Dover's Pass, where Lake Pukaki comes suddenly into view.

Dr. Von Haast has justly observed that "amongst the different Alpine lakes of the Province of Canterbury, Lake Pukaki is without doubt the most picturesque. It lies one thousand seven hundred and forty-six feet above the sea, is ten miles long and four miles broad, and its formation is one of the most interesting objects which can be presented to the geologist and physical geographer. Nowhere, so far as my knowledge extends, are the proofs so convincing that it has, like similar lakes in other Alpine regions, been formed by the retreat of an enormous glacier. But it may truly be stated that the view from its shores towards its sources will rival in beauty and majesty any known views in the world. In the centre, Mount Cook, resembling a large white tent, rises above the other ice-clad giants, of which Mount Stokes and Mount Sefton to the



LAKE TEKAPO, MACKENZIE COUNTY.

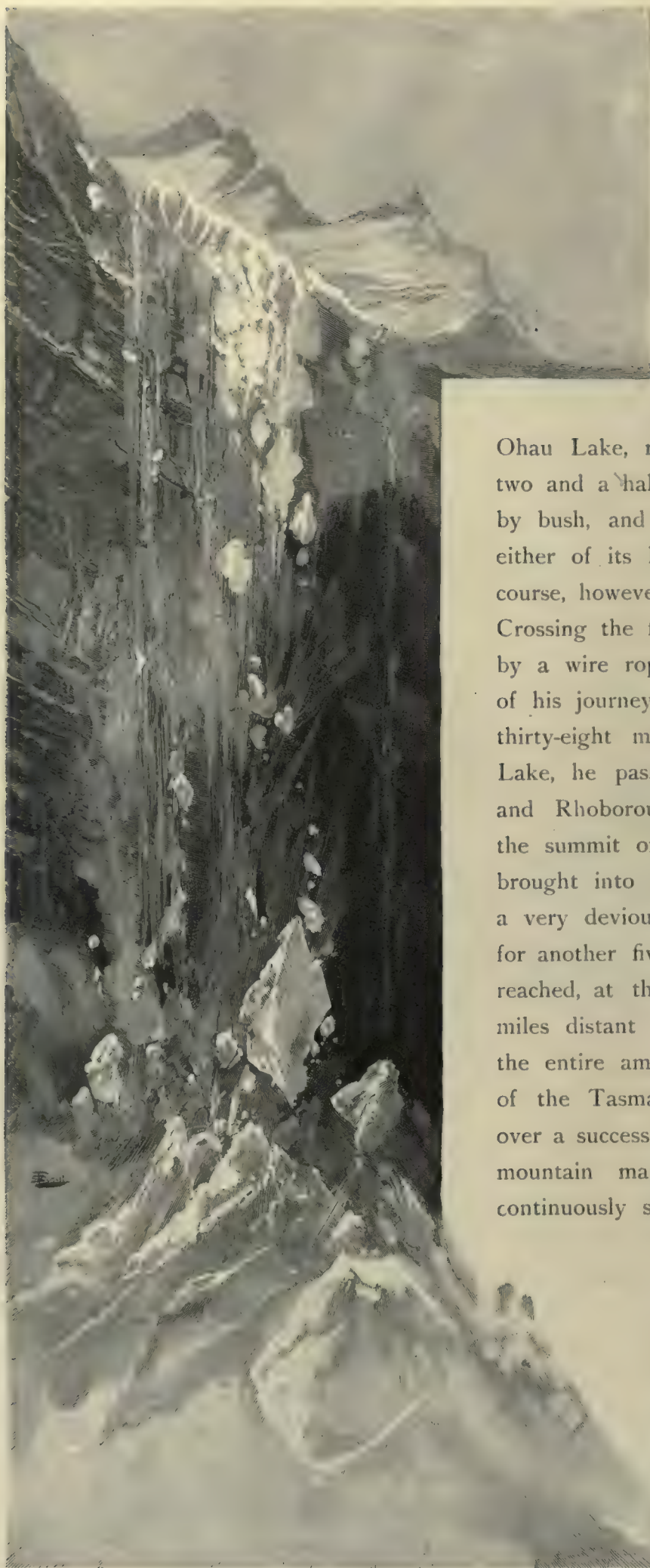
south, and Mount Haidinger to the north, are the most conspicuous. The bed of the River Tasman, nearly as wide as the Lake itself, continues for twenty-three miles in a straight line to the base of Mount Cook, here dividing into two branches, of which the the eastern one is the broadest and most important. In this main branch, two miles above the southern foot of Mount Cook, terminates the great Tasman Glacier, the largest of all New Zealand glaciers. On both sides, the ranges present us not only with *roches*



LAKE PUKAKI AND MOUNT COOK.

moutonnées, but also with terraces cut into the rock, sloping down at such an angle that their fall can be accurately measured (from one and a half to four degrees)."

The Lake is flanked by mountains, the Mary Range extending down one side, and on the other the Ben Ohau, lofty and crested with snow, while between them, and shutting in the prospect at the head of the Lake, the Southern Alps loom up far into the heavens, culminating in Mount Cook, massive in its proportions, majestic in its sheeted splendour of ice, and awe-inspiring in its tremendous height. Seen as the setting sun is lavishing upon it a wealth of changeful iridescent hues, "it looks like an enormous intensely-illuminated crimson flower held in Nature's white fingers for the sun's dying blessing; while the sky overhead wears a soft violet hue, blending away towards the zenith, by the most delicate gradations, into zones of orange red and primrose yellow." The immediate head of the Lake is a swamp formed by the waters of the Tasman River which flows into it. In fact, both Pukaki and Tekapo are fed chiefly by the Godley, Cass and Tasman Glaciers, of which the first-named has been termed by



AN AVALANCHE IN THE SOUTHERN ALPS.

Hochstetter the *Mer de la Glace* of New Zealand. The entire course of the Tasman River, from the glaciers to Pukaki, a distance of twenty-two miles, is perfectly straight, and there is only one slight bend in the Godley, which is of about the same length. Twenty miles farther on from Pukaki lies the Ben

Ohau Lake, measuring twelve miles long by two and a half miles broad, nearly surrounded by bush, and with much clearer waters than either of its larger neighbours. The tourist's course, however, does not lie in this direction. Crossing the ferry at Pukaki, which is worked by a wire rope, he starts on the last stage of his journey to the Mount Cook Hermitage, thirty-eight miles distant. After leaving the Lake, he passes on the left the Ben Ohau and Rhoborough Downs Stations, and from the summit of the Downs the Lake is again brought into view, its margin approached by a very devious course, and its shores skirted for another five miles until the Glentanner is reached, at the head of the Lake and thirteen miles distant from the ferry. Now opens up the entire amplitude of the extensive valley of the Tasman, and as the traveller passes over a succession of low downs, mountain after mountain marches into sight, presenting a continuously successive series of kaleidoscopic pictures. It is not until he has passed the present Glentanner homestead, twelve miles from the head of the Lake, that the tourist obtains a first correct glimpse of the Great Tasman Glacier, and, mounting the downs which lie between him

and Birch Hill, seven miles farther still, he realizes more adequately the vastness of the Glacier. It lies to the right, while part of Mount Sefton is visible to the left. Straight across the Tasman River the Liebig Range, with Mount Stanhope, forms an impenetrable wall, and nearer the Lake the Play-ground and Howard Peaks dominate that portion of



MOUNT COOK AND THE HOOKER GLACIER.

the view. From the Downs the road descends to some flats, and leads across a number of creeks to Birch Hill Station, where we learn that we are only six miles from the Hermitage. The entire Tasman Glacier with its moraine accumulations is now in open view, the streams that unite to form the Tasman River issuing from its terminal face, and above them

some of the feeders produced by the Ball and Hochstetter Glaciers. Away to the left the lofty peak of Mount Sefton stands strikingly forth, its clear-cut outline in bold relief against the sky.

Proceeding steadily on, the broad valley of the Hooker to the left of Mount Cook opens up, and a sight is obtained of the Hermitage, snugly ensconced under the shelter of the bush-clad slopes of the moraine formed by the Mueller Glacier. Then, rounding the tremendous rocky bluff variously called Gibraltar and Sebastopol, Mount Sefton

comes once more within the range of vision, and, as one nears the Hermitage, Mount Cook himself, or as the natives have more aptly termed him, *Aorangi*, "The Cloud-piercer," glides majestically into view.

A three-mile drive from Gibraltar conducts to the Hermitage, and Mount Sefton welcomes the arrival of the visitor to its solitudes by a thunderous discharge of mighty avalanches down his embattled sides. The giant *Aorangi* dwarfs all the companion peaks. Since the ascent of the Rev. W. S. Green, with his two Swiss mountaineers, in 1882, no one seems to have essayed the perilous feat of mounting to its summit. After climbing to an altitude of some four thousand feet above the sea-level, the adventurous travellers found themselves abreast of the southern *arête* of the Mountain whose glittering mass of ice-precipices and hanging glaciers stood up over eight thousand feet above them. "The actual summit, a flattish cap of ice, did not become visible, clear of a lower peak, till we had advanced about half-a-mile



AN ALPINE CLIMBER.

farther. Mount Tasman was hidden by the shoulder of Mount Cook, but the great ice-fall of the Hochstetter Glacier, pouring down from the hollow between these two mountains, presented us with as grand a spectacle as it is possible to conceive. Rising beyond this glacier the square-topped Mount Haidinger, robed in white glaciers, stood as the next worthy member of this giant family. After dwelling on some smaller peaks, our eyes swept round to the great mass of Mount de la Bêche, looking something like Mount Rosa, and occupying a conspicuous position between two main branches of the Glacier. Farther off, Mount Elie de Beaumont appeared, and then the great buttresses of the Malte Brun Range, which flanked the side of the Glacier opposite Mount Cook, and shut out from our view its own finest peak and Mount Darwin beyond. The glacier on which we stood, having an area about twice as great as that of the Great Aletsch, the largest glacier in Switzerland, is really a union of many fine streams of ice, which, coming in on all sides in graceful curves, bear along their tale of boulders to swell the great rampart of moraine which gave us such difficulty to surmount. The

ice beneath our feet was that coming from the Hochstetter Glacier, its lateral moraines marking off its identity for many miles after it had united with the main stream. We counted in all thirty distinct glaciers in sight together, some covered with moraines, others composed of purer ice, and the smaller ones on the Malte Brun Chain, from their insufficient mass, were broken off high up in their ravines, and sent their ice down in avalanches, and their streams in glancing cascades."

From a shoulder of the Mountain, and less than five thousand feet from its icy crown, the climbers were rewarded with a magnificent prospect. "Deep down beneath

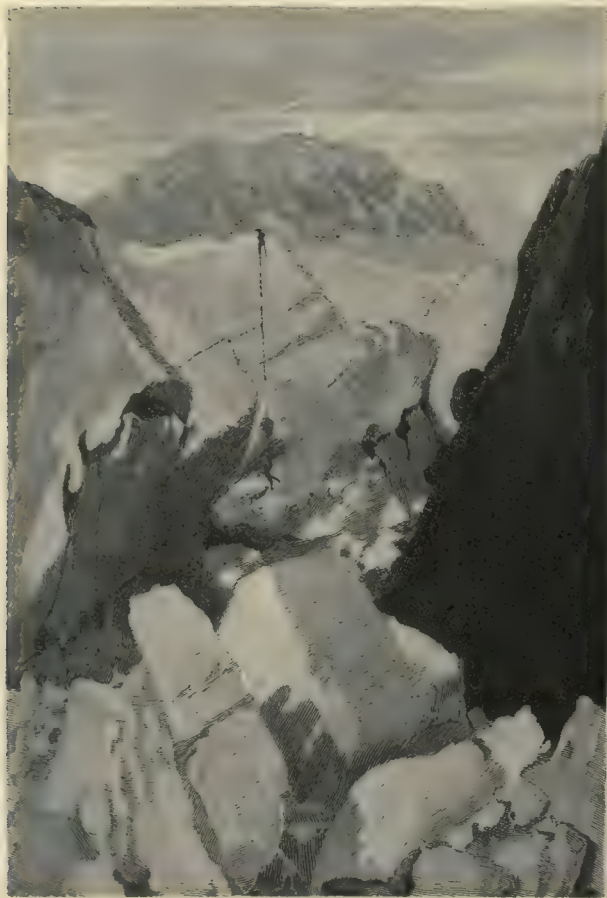


MOUNT SEFTON AND THE HOOKER RIVER.

us lay the Hooker Glacier, reminding us of the downward view from the *arête* of the the Finsteraarhorn; while beyond, the glacier-seamed crags of Mount Sefton towered skywards. Farther off lay the *Mer de Glace* of the Mueller Glacier, a splendid field of white ice, its lower moraine-covered termination lost in the blue depths of the valley at our feet. The high ridge connecting Mount Sefton with Mount Stokes alone prevented us from seeing the western sea. It was a glorious day, scarcely a breath of air stirring; no cloud visible in the whole vault of blue; ranges upon ranges of peaks in all directions and of every form, from the ice-capped dome to the splintered *aiguille*. It was a wonderful sight, those lovely peaks standing up out of the purple haze, and then to

think that not one had yet been climbed! Here was work, not for a short holiday ramble merely, not to be accomplished even in a life-time, but work for a whole company of climbers, which would occupy them for half a century of summers, and still there would remain many a new route to be tried."

At 5.30 p.m. on the 2nd of March, 1882, or the close of the sixth day from the time they started to scale the Mountain, the party "reached the highest rocks, from



SURMOUNTING A GLACIER.

which an easy slope led up to an icied *bergschrand*, which, starting from the cornice of the *arête*, ran round the cap of the summit from left to right. . . . We bore away to the left to avoid the highest part of the *bergschrand* above us, and surmounting the cornice without any difficulty, at six p.m. stepped on to the topmost crest of Aorangi. A look backwards, down into the dark, cloud-filled abyss out of which we had climbed, was enough to make us shudder; it looked fathomless, and this white icy ridge on which we stood, with torn mists driving over it before the fierce nor'-wester, seemed the only solid thing in the midst of chaos. Mount Cook was now practically conquered. We advanced rapidly along the cornice, which rose at an angle of about twenty degrees towards what was mathematically the highest point, now and then cutting a step for greater security, but in most cases trusting to the grip gained by the nails in our boots. Sometimes a blast

would come upon us with such force as to compel us to crouch low and drive in our axes firmly, to guard against being blown off into space. Fierce squalls would shatter the icicles of the cornice and send them down the slopes up which we had climbed. Descending with a swishing sound, they soon pounded themselves to pieces, and so accounted for the showers of coarse hail which had proved so disagreeable on the final ice-slope."

The two largest glaciers on the Hermitage, or western side of Mount Cook, are the Hooker and the Mueller, the former descending in two branches from the south and south-western slopes of the Mountain, and being enlarged by several branches from Mount Stokes and the Moorhouse Range. Opposite to it, the Mueller Glacier descends from the south-western slopes of the Moorhouse Range, while its glacial cave lies two thousand eight hundred and fifty-one feet above the sea-level. These two glaciers are the most accessible to the tourist from the Hermitage, just above which the Mueller assists to swell the Hooker River. Some time may be profitably spent in exploring their ice-caves, visiting the ice-pinnacles forming a crystal wall some seven hundred feet in height, gathering edelweiss, or hunting the curious little *weka*, a semi-nocturnal woodhen, which, if unable to fly, can at any rate run with the swiftness of a rat.

A separate day, or rather several days, must be chosen for a trip to the great Tasman Valley and Glacier, which lie on the other side of Mount Cook from the Hooker and Mueller. It is the most important of all this family of glaciers, its length being about eighteen miles, whilst even at its terminal face its breadth is one mile and three-quarters. Streams issue from both sides of it. The outlet of the Tasman River does not always appear to be in the same place, for sometimes it seems to emerge from the eastern side, and at other times from near the centre of the Glacier, which, by the way, is the lowest in the colony, as its extremity is only two thousand seven hundred and seventy-two feet above the level of the sea. The terminal face is easily accessible even to horsemen when they have reached the river-bed above the delta



A GLIMPSE ON THE FRANCIS JOSEPH GLACIER.

swamps, which, for about six miles above its entrance into the Lake, fill its entire valley. But progress is exceedingly slow and laborious from the terminal face onward. It took Von Lendenfeldt, in 1883, six days to get from the terminal face to the foot of the Ball Glacier, eight miles above it. For a distance of three miles upward the Glacier is entirely covered with an enormous deposit of *débris*, so that the ice is only now and then visible in transverse and longitudinal crevasses, and in large holes from one hundred to one hundred and fifty feet deep. Von Haast says that "it was with great difficulty, when travelling up to it, that I found my way through the old lateral moraines, lying on the eastern side above the drift formation; the passage being barred by enormous masses of huge blocks, over which it was difficult even to lead a horse. For several miles upwards the Great Tasman Glacier is entirely covered by moraines of great depth. . . . The main body of the Tasman River finds its exit on the eastern side of the Glacier, about two hundred yards above its terminal face, from a

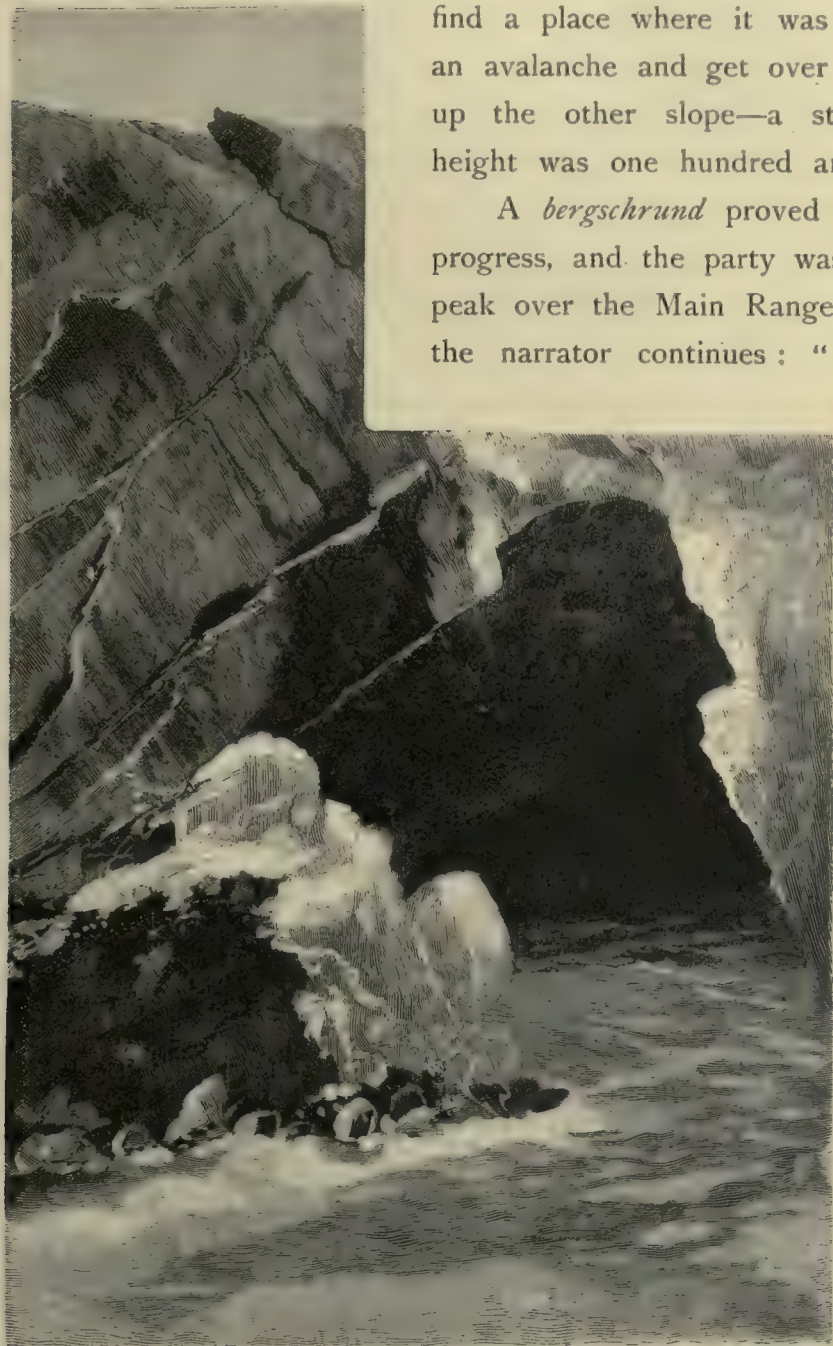
number of caves and fissures joining the large outlet from the Murchison Glacier, which had already washed its eastern side for more than two miles. The River meanders through its valley, here two and a half miles broad, in at least twenty channels; it has a great body of water, but in fine weather is easily fordable on horseback by anyone having knowledge sufficient to select the fords. To its junction with the Hochstetter Glacier, descending in a deep valley between Mount Cook and Mount Haidinger, this Glacier (the Great Tasman) has only lateral moraines, but after the junction a large medial moraine is formed which very soon covers the whole Glacier; only here and there large hollows filled by pools of water of a deep blue colour and often of large extent, being two hundred to two hundred and fifty feet deep, betray in their perpendicular walls the existence of ice." The slowness of the glacier motion is evidenced by the fact that the sun is able to melt its flanks and to maintain a clear space from ten to thirty chains broad on either side of the valley, while dense vegetation covers its southern part.

The great ice-fall of the Hochstetter Glacier pours down from the hollow or basin between Mount Tasman and Mount Cook, and presents a spectacle of surpassing grandeur, forming in its descent "a splendid cascade of ice four thousand feet high." At its juncture with the Tasman Glacier there is a hole about five hundred feet deep. The Hochstetter Dome stands at the northern end of the Hochstetter Glacier, and dominates all the peaks of the Malte Brun Range. It is especially remarkable for the length, breadth and depth of the crevasses on its southern slope. Von Lendenfeldt, who made the ascent, along with his wife and three porters, from the eastern side, on the 25th of March, 1883, says:—"After travelling for some distance we reached the foot of the steep ice-slope which descends from the ridge of Mount de la Bèche at 9.30, and remained there half-an-hour before continuing our ascent. The farther we proceeded up the Glacier the more the crevasses vanished, and the latter part was a flat glacier for miles as smooth as an asphalt pavement, with an incline of only three degrees, although the line of perpetual snow lies much higher than this place, which is only about five thousand feet above the level of the sea. The eastern wall of Mount de la Bèche is one of the most remarkable sights around the Tasman Glacier. It is covered with a coating of ice several hundred feet thick, splintered up into large blocks of a quadrilateral shape. These blocks are formed by immense quantities of frozen snow, which has not yet been transformed into crystallized ice. The ice is not blue, as it is in the ice-fall of the Hochstetter Glacier, but quite white throughout. This furrowed coating of snow reaches up to the range of Mount de la Bèche, which is the highest point of the mass of elevation that divides the Tasman Glacier from the Rudolph Glacier. I have calculated the height of Mount de la Bèche at ten thousand one hundred and seventy-nine feet, so that it is the third mountain in height in the Southern Alps; the highest mountain being Mount Cook, the height of which is twelve thousand three hundred and forty-nine feet, and the next Mount Tasman, ten thousand six hundred and forty-eight feet. All the other mountains which form the enclosure of the basin of the Tasman Glacier are about ten thousand feet high. Making our way up the undulating ice-slopes winding about between the crevasses, we at length got over most of them, and reached the saddle between the Hochstetter Dome and Mount Elie de Beaumont at 12.30 p.m.

From this saddle we could see the flat land on the west coast, and here we had the first view of the western ocean. The westerly lower peak of the Hochstetter Dome is round, the easterly one is pointed. We made for the latter. There was a large crevasse before us, which was soon reached; we had not only to find a place where it was bridged over by the *débris* of an avalanche and get over it, but we also had to cut steps up the other slope—a steep wall of ice. Although the height was one hundred and ten feet, this took an hour."

A *bergschrund* proved a formidable obstacle to farther progress, and the party was obliged to go round the highest peak over the Main Range on the northern side. After this the narrator continues: "I was able to scramble up the

ice-wall, and we were over the *bergschrund* at 4.30 p.m. We got up to the main ridge again, cutting steps along the upper margin in very steep ice, and then walked along the ridge towards the summit. Another crevasse, which runs through the summit from north to south, forced us to descend the steep northern side once more. We rounded this last difficulty and cut steps up to the top. The incline of this last bit was so great that it was necessary not only to cut large steps to stand in, but also to cut little holes for our hands. Slow was the work, and I had to exert all the energy that was left in my brain to press on. At last, when lifting the ice-axe for a



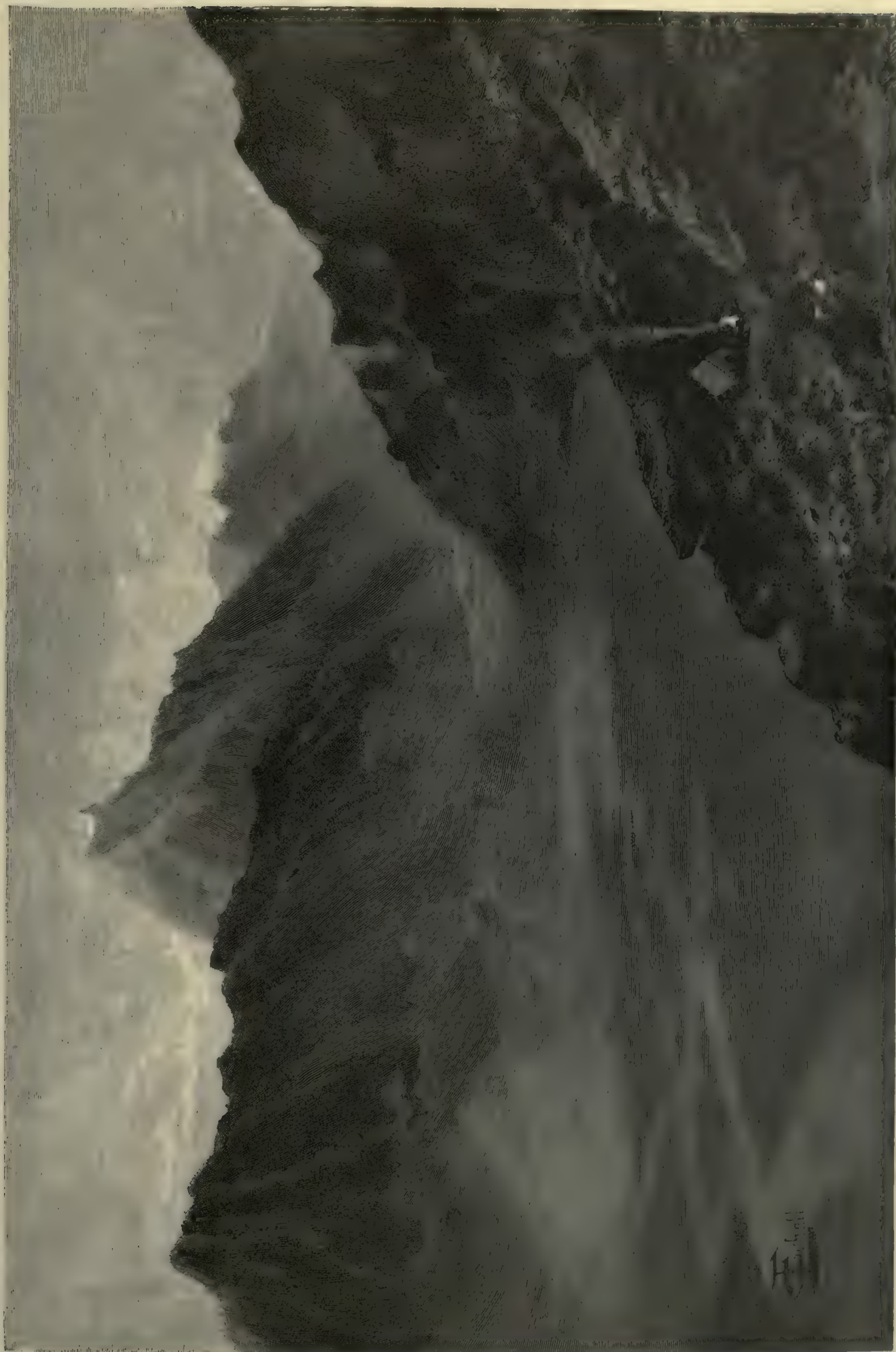
A GALACIAL CAVE.

blow, I saw the sun shining on its glittering blade; the sun shone over the top. Two steps more and I was on the top, and pulled the others after me with the rope; this was at 5.50 p.m. The sky was cloudless, and not a breath of wind disturbed the absolute stillness which surrounded us. New Zealand lay at our feet. We surveyed the land from sea to sea—a glorious panorama; the Southern Alps extended from south to north, glittering in all the colours of the rainbow in the parting sun. . . . The wide expanse of the western ocean, changing in colour rapidly as the sun neared the horizon, lay at our feet to the westward; the clear straight horizon line apparently towering to heaven. We could discern the coast-line to the south of Hokitika and the belt of flat land which fringes the western slope of the Southern Alps. We could dimly recognize

parts of the great eastern plain, nearly all Canterbury and Westland being visible. We could trace the great mountain chain from Nelson to Otago, and survey the land from sea to sea. The grandeur of the scenery around aroused in us an idea of the sublime; we felt ourselves nearer to the Absolute, and felt proud and happy with the thought that all the grand glaciers and rocks around were conquered by our energy and skill."

From the Hermitage one may cross the Mueller Glacier to the foot of Mount Sefton. It is a walk of only twenty minutes to the Glacier, and on the way across the frozen mass, the spot is passed where the Mueller River, after having travelled for miles under great fields of ice, bursts forth into the open light of day and speeds on its impetuous course to join the Tasman. The ice-caves must not be overlooked. Beneath one's feet is heard the subterranean torrent as it hurries with unceasing roar to its place of emergence, while overhead and around there is diffused an intense blue colour, caused by the sunlight penetrating the walls and roof of ice. These ice-caves and crevasses are objects of very great interest to visitors. Having at last scrambled over the glacier with its moraine *débris*, the adventurous tourist arrives at the foot of the striking Moorhouse Range crowned by the bold summit of Mount Sefton, "which with its huge snow-fields and numerous tributary glaciers descending into the valley forms one of the most striking vistas in the Southern Alps." Dense masses of cloud encompass and swathe the central part of its colossal bulk, but far above them swells and towers aloft the stately summit ribbed and flecked with ice, forming pinnacles, cascades, and other fantastic shapes which glow with all the colours of the rainbow. While one stands in rapt delight, the eye may catch sight of a descending avalanche sending up clouds of snow, and immediately afterwards the ear is startled by the thunderous volley which proceeds from the falling mass. Another important feature of the scene is that formed by the swift and turbulent Hooker River, which issues from the valley of the same name in one large stream close under the spur of Mount Cook, and continues its course across an ample valley until it meets the Tasman. Its sides are bordered, and part of its channel is studded, with heavy boulders, against which the ice-cold waters angrily dash and gurgles in swirling eddies.

Farther away to the north, and nearer to the west coast, lie two other splendid glaciers—the Francis Joseph and the Agassiz—of which the former descends from the great snow-fields of Mounts Tasman and De la Bèche to the singularly low position of only seven hundred and five feet above the sea-level. It was discovered and named by Von Haast, who has placed on record the following description of the panorama as viewed from Lake Okarita:—"The contrast between the ever-restless sea—the gigantic waves coming and going without intermission—and the quiet water-shed of Lake Okarita, with its numerous islands, surrounded by luxuriant forest, was most striking. Above the forest plains rose low hillocks, also clothed with the same intensely green west-coast vegetation, over which the Southern Alps appeared—a mass of snow, ice, rock and forest. As far as the eye could reach, mountain appeared behind mountain, all clad in their white garments, with which they are covered during the whole year almost entirely, becoming apparently lower until they appeared only as small points over the sea horizon—half cloud, half ghost, as a modern philosopher has said so well. But what struck me more than anything was the low position reached by an enormous glacier descending



THE VALLEY OF THE TASMAN.

north of Mount Cook from the ranges, appearing between the wooded hillocks at the foot of the Alps. The sun being near his setting, every moment new changes were effected; the shades grew longer and darker, and whilst already the lower portion lay in a deep shade, the summits were still shining with an intense rosy hue. Turning towards the sea, the same contrast of colours was exhibited, the sea being deep blue, whilst the sky was of such a deep crimson and orange colour that if we could see it



IN THE PUBLIC GARDENS OF OAMARU.

faithfully rendered by an artist we should consider it highly exaggerated. But the beauty of the magnificent scene did not fade away even after the large orb of the sun had disappeared, because as night advanced the full moon threw her soft silver light over the whole picture, and lake and sea, forest and snowy giants still were visible, and my heart swelled with such a pure delight as only the contemplation of Nature can offer to her admirers."

Continuing his journey along the coast to the Waiau River, Dr.

Haast says: "The view from the mouth of the Waiau River is most magnificent, as the valley, being straight and nearly two miles broad, allows us to gaze at the Southern Alps from foot to summit, having in the foreground the enormous ice masses of the Francis Joseph Glacier appearing between a rich forest vegetation." Following the course of the Waiau, the party at last reached the Agassiz Glacier, and "turning a rocky point we had at once the white unsullied face of the ice before us, broken up in a thousand turrets, needles and other fantastic forms, the terminal face of the Glacier being still hidden by a grove of pines, *ratas*, beeches, and arborescent ferns in the foreground, which gave to the whole picture a still stranger appearance."

OTAGO.

Regaining Tīmaru by the same route followed in leaving it, the railway soon carries the tourist to the southern confines of the province of Canterbury. Crossing the spacious bridge, which spans the impetuous Waitaki where it approaches the ocean after a rapid course from the base of Mount Cook, the train enters the splendid province of

Otago, so named from a corruption of the Maori word "Otakou," signifying red earth, and originally applied merely to the still existing native settlement on the heights above Port Chalmers. Gradually the level prairie becomes more undulating, and shortly after three o'clock the traveller finds himself in the outskirts of Oamaru. Looking seaward, the port is seen to be a fac-simile of that at Timaru. Originally a dangerous open roadstead, skill and enterprise have combined to convert it into a safe and commodious harbour by the construction of a concrete breakwater, one thousand eight hundred and fifty feet long, thirty-six feet wide, and thirty-two feet high, and of a rubble mole stretching out for one thousand seven hundred and twenty feet in the direction of the breakwater, the entrance between them being about four hundred feet wide, and the space enclosed



THAMES STREET, OAMARU.

having an area of about sixty acres. Vessels with a draught of twenty-four feet can be conveniently berthed alongside the commodious wharves, upon which the trucks from the railway can be run down to the very side of the shipping.

The town is very well built, of an almost perfectly white stone, from the prevalent use of which as a local building material it has received the very appropriate title of "The White City." It is the handsomest town of its size in the colony. The stone, of which extensive quarries exist in the immediate neighbourhood, contains over ninety per cent. of carbonate of lime, and is said to be exactly similar to the Maltese limestone of which the town of Valetta is built. Oamaru is the outlet of the most extensive and prolific grain-producing district of New Zealand, and the massive piles of architecture grouped about the business portion of the town, as well as the presence of numerous local industries, indicate the energy and progressive character of the population. Thames Street is a noble thoroughfare, possessing some stately buildings; among those that

readily catch the eye being the branch offices of the Banks of New South Wales and New Zealand. The noticeable three-storey block consisting of the Queen's Hotel and shops forms about the finest pile of masonry in the place. From Thames Street one



PORT CHALMERS.

proceeds by the intersecting thoroughfare of Severn Street to the Botanical Gardens, amid which a charming fresh-water creek winds a very serpentine course. The Esplanade is a spacious promenade facing the harbour, and there is a capital cricket ground near the North Town Belt. Oamaru is the terminus of two branch railway lines, of which one extends up the valley of the Waiareka twenty-four miles, and the other up the valley of the Waitaki to Hakateramea, about fifty miles. The finest ecclesiastical building is St. Columba's Presbyterian Church; and the Waitaki High School is the chief scholastic

institution. The Press is worthily represented, and the leading industries are suggested by the woollen factory, two large meat-freezing works and abattoirs, and numerous grain stores.

Oamaru is seventy-eight miles north of Dunedin, and midway between the two places lies the town of Palmerston, in a picturesque valley surrounded by low and undulating hills. It is the point of departure by coach for the Dunstan gold-reefing district, while coal-mining operations are carried on at Shag Point, only six miles distant. The remaining forty miles of the trip to Dunedin lie through highly diversified country, with the greatly indented contour of the coast-line on one side, and pleasing alternations of hill and vale on the other. After leaving Blueskin, the railway line skirts the farthest verge of bold and precipitous cliffs; then plunges through the Deborah Bay Tunnel and out again into the brilliant sunshine; until, passing the Maori "*kai*," at which reside the chief Taiaroa and his people, the tourist finds himself gazing down from an eminence upon the substantial little town of Port Chalmers, lying secluded within the bight of Otago Harbour. This important haven is an estuary, or arm of the sea, fifteen miles deep. The entrance is between Taiaroa Head, a bold dome-shaped headland, two hundred and forty-four feet high and crowned by a battery of guns, and Hayward Point, a precipitous bluff at the end of the Peninsula which projects from the main-land below Dunedin. Between these two heads, a bar of hard white sandstone extends about a mile in a north-westerly direction. It is the chief drawback to the Port.

The channel from the Heads up to the wharves, seven miles distant, is comparatively deep, but narrow. From Port Chalmers the estuary penetrates farther inland to Dunedin, a distance of eight miles. Port Chalmers is small but decidedly solid, most of its buildings being constructed of a bluish stone quarried in the neighbourhood. The wharfage accommodation is ample, and all the conveniences of a first-class harbour are provided. The Graving Dock, which was opened as long ago as 1872, measures three hundred and twenty-eight feet long by forty-one feet wide, while the depth of water ranges from seventeen feet six inches to twenty-one feet six inches. There is also a floating-dock one hundred and seventy feet long by forty-two broad. Since January, 1882, the largest steam-dredge in the world has been busily engaged in deepening the entrance to the Port and the channel of the Upper Harbour to Dunedin, which has now been completely buoyed. Amongst the public institutions may be mentioned the Sailors' Rest, the Mechanics' Institute and the Foresters' Hall, and the chief local industries that strike the eye are the quarries, the gas-works and a cordial factory.

THE CITY OF DUNEDIN.

The train which the visitor enters at the Port crosses one of the principal streets, plunges into a short tunnel, and thence pursues a serpentine course along the margin of the channel to Dunedin. On the right are sloping hills more or less wooded, and dotted with growing settlements, and away across the water-way on the other side is the undulating contour of the Peninsula, now almost wholly denuded of timber. Passing the suburb of Ravensbourne and turning the corner of a cliff, the channel opens out and deflects to the south, and the city of Dunedin, the metropolis of the South Island, lies stretched out before the eye. Along the entire length of the fore-shore, and for some distance inland, are long lines of noble thoroughfares pursuing an even course

over land that has been won from the sea, and at their back steep heights over which the city climbs in irregular fashion and hides its confines on their farther sides. Away

to the left is the narrow tongue of flat land that connects the Peninsula with the site of the city and the gleaming waters of the Pacific, chanting a low monotone as they roll lazily into the broad strand of the ocean beach with its low sand-hills. To the right the horizon is bounded by the elevated land that



sweeps away in the direction of Port Chalmers. Dunedin is a very attractive and pre-tentious city, lacking only a harbour such as that of Auckland or Wellington to give

it pre-eminent rank. From the bridge over the line at the fine Railway Station one may gain a moderately good view of the business heart of the place, throbbing with the deep pulsations of active commercial life. Rising from a slightly elevated site to the left stands the First Presbyterian Church, a stately and well-proportioned edifice built of the white

SCENES IN AND AROUND DUNEDIN.

Oamaru stone, and proclaiming to the stranger the devotion of the pioneers of settlement to the "Auld Kirk." Turning to the harbour, the eyes rove over Rattray Street Wharf and its companion piers to the evidences of continuing enterprise in the reclamation of land

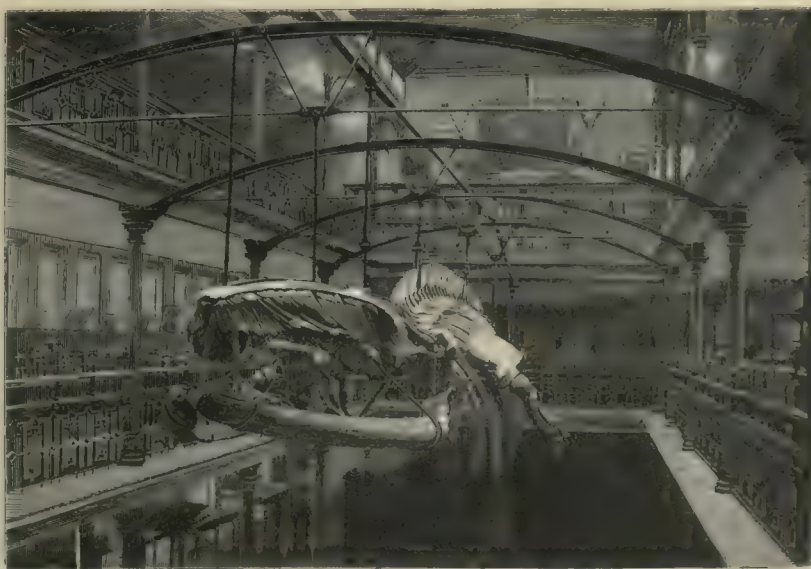


THE HIGH SCHOOL, DUNEDIN.

from the sea, and of plodding energy in the deepening of the channel for the improvement of maritime facilities. Up to the end of June, 1886, no less a sum than five hundred and ninety-seven thousand pounds had been expended on harbour improvements, and vessels with a draught of sixteen feet may now be brought right up

to the wharves, which, as Dunedin is the head-quarters of the powerful Union Steamship Company, are always flanked by one or more vessels of the familiar red-funneled fleet. The Gaelic name of Edinburgh has not been inaptly bestowed upon this very prepossessing New Zealand city. In the first place it resembles its Old World prototype in its hilly situation. But a stronger resemblance still to the modern Athens is the high regard in which learning and culture are held. Splendid provision has been made for higher education, while the City School Committee controls seven State primary schools with an aggregate average attendance of three thousand eight hundred and sixty-three.

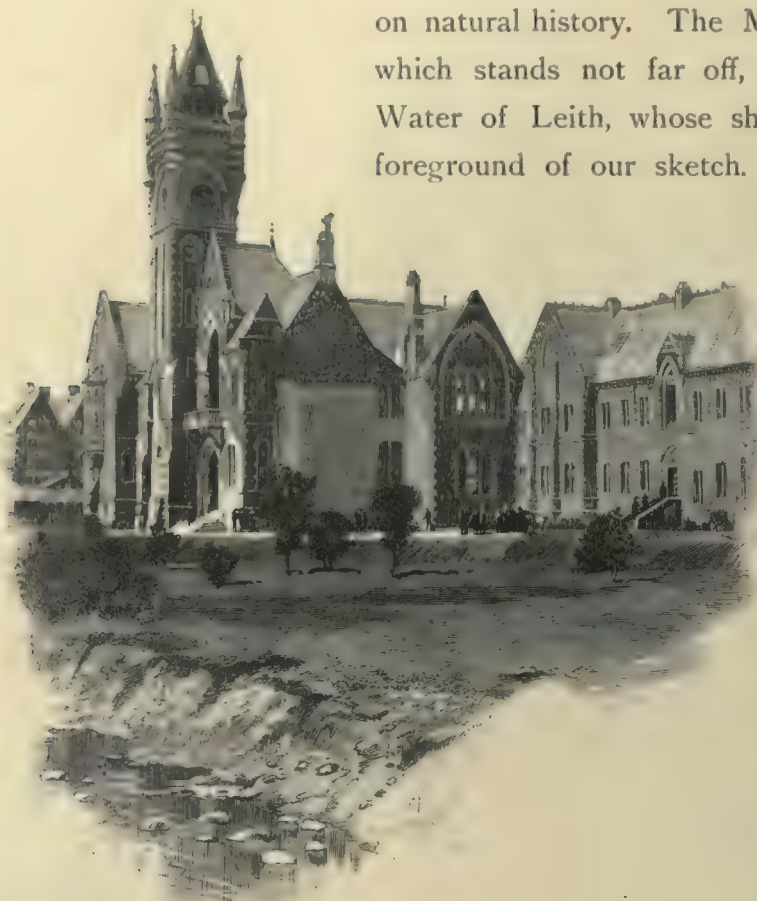
The chief seat of secondary education is the handsome building known as the Boys' High School, which was completed in February, 1885. It has a curiously castellated appearance, a square and massive tower rising from the centre of the façade to a height of sixty-eight feet, and its corners being finished off with steeples. It is one of the finest buildings in the city, and no other secondary school or college in the colony can boast such palatial or commodious quarters.



THE INTERIOR OF THE MUSEUM, DUNEDIN.

Another "lion" of the place is the Museum—a plain three-storey building at the

northern end of Great King Street, and not far from the Botanical Gardens. It consists of a hall, ninety feet long by forty-five feet broad, with two galleries and an extensive basement, and it is enriched with upwards of six thousand specimens of natural history, of which the most striking is the perfect skeleton of a gigantic whale depending from the cross-beams between the upper and lower galleries. Behind the hall is situated the library, containing more than one thousand nine hundred works on natural history. The Museum is connected with the University, which stands not far off, on a reserve of eight acres, near the Water of Leith, whose shallow pebbly bottom occupies the near foreground of our sketch. It is a striking-looking building, very



THE DUNEDIN UNIVERSITY.

solidly built, and fitted up internally on the most approved style. Its library contains about four thousand volumes. The Hospital, with its grounds, occupies an entire block five acres in area. Another square block constitutes the North Dunedin Recreation Ground, the sides planted with trees, and the central space open. From this point, it is but a short walk along Great King Street to the Botanical and Acclimatization Gardens, at the entrance to which the roadway sweeps off to the charming little suburb of the North-east Valley. From the Gardens proper a little wooden bridge spans a

small stream or creek, and affords the traveller access to the Domain, which appears to consist largely of the primeval bush. In the road outside, the trams are filling up with loads of passengers for the city and its southern suburbs, but for the nonce the visitor may elect to take a solitary walk up the steep little acclivity to the Northern Cemetery, where many of the early settlers, "after life's fitful fever," are lying at rest in their narrow homes. Some of the monuments are handsome in design, and most of the grave enclosures bear witness to loving and watchful tending. Between the Cemetery and the small basin of Pelichet Bay lies the oval enclosure known as the North Cricket Ground, while, bounding the horizon inland, stand the heights of Maori Hill, Roslyn and Mornington, each of them giving its name to a separate borough. More remote from view, and in close proximity to the ocean beach, at the southern end of the city, extend the suburban boroughs of St. Kilda, South Dunedin and Caversham. Right behind, and on the slopes of the hills which one passes in approaching Dunedin, is situated the borough of West Harbour, or, as it is more familiarly and prettily termed, Ravensbourne. So that this large centre of population practically consists of a congeries of eleven closely related boroughs, which have agreed to divide and govern.

Leaving the vantage point at the Cemetery, and retracing one's steps to the Museum in Great King Street, the intersecting thoroughfare of Albany Street directly carries one by the tram-route into George Street, a rather narrow but very busy artery,

which at the open space known as the Octagon takes the name of Prince's Street, and thence continues its perfectly straight course as far as the boundary of Caversham. These two streets describe a total length of two and a half miles through the city, and both commercially and architecturally they are the leading thoroughfares of the place. Passing into George Street from Albany Street, the eye falls, at the next corner, upon a fine church



THE KNOX PRESBYTERIAN CHURCH.

with a lofty and symmetrical tower, resembling in its general outline and style First Church, but built of stone of a more sombre hue. It is the Knox Presbyterian Church, where the venerable and stalwart Dr. Stuart has filled the pulpit for many years past.

This province of Otago, has a history as interesting as that of the sister province of Canterbury. Its colonization was projected and carried out under the auspices of a Scottish Presbyterian Association, formed at Glasgow, in May, 1845, of lay members of the Free Church of Scotland, from the General Assembly of which Church the scheme

met with express approval. The necessary blocks of land were purchased from the New Zealand Company, and with a view to the establishment and permanent endowment of religious and educational institutions of a Presbyterian type, it was made a fundamental article of the contract that the price of the land to the Association should be at the rate of two pounds per acre, but that one-eighth of the price so obtained should be made over to trustees for religious and educational uses in connection with the Free Church of Scotland. When, in 1850, the New Zealand Company surrendered its rights to the Crown, the latter continued to observe the original compact, and, as a consequence, the Kirk waxed wealthy and powerful, and educational



THE CITY OF DUNEDIN.

institutions sprang up and developed vigorously. This ecclesiastical acquisition of a share of the unearned increment explains also the otherwise strange anomaly of two distinct Presbyterian Churches existing in New Zealand, separated only by territorial limits, as their policy is precisely the same: viz., the Presbyterian Church of Otago and Southland—comprehending merely those two districts; and the Presbyterian Church of New Zealand, which comprises the rest of the colony from South Canterbury northward. From time to time the latter Church has made overtures for union, but its twin sister, while willing to be linked in the bonds of fellowship, has amusingly displayed the national canniness in questions of finance by declining any closer and more real union which would involve a division of

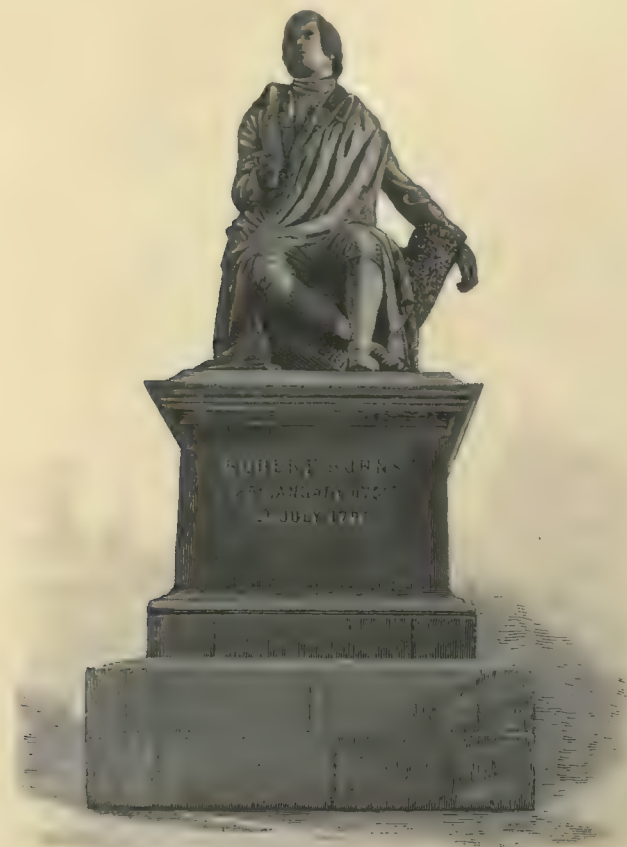
the loaves and fishes. Hence, one Church is strongly and richly endowed while numerically weaker than its poorer and more catholic sister. Presbyterianism, too, still remains the dominant religion of Otago and Southland, although the disparity in number between its adherents and those of other forms of religious belief is lessening year by year.



THE PRESBYTERIAN FIRST CHURCH.

The pioneer colonists arrived at Port Chalmers in March and April, 1848, under the charge of Captain William Cargill—to whose memory a monument has been raised in Prince's Street—and the Rev. Thomas Burns, a nephew of the immortal bard. We are told, and can readily believe, that “the prospects were not very cheering to those harbingers of the present community, and doubtless the hearts of many of these failed them, while sailing up the harbour, on seeing on both sides steep hills densely wooded to their summits, without a patch of open land except the barren sands at the Maori settlement. The discomfort of being conveyed in open boats, along with their household effects, from Port Chalmers, and landed on the shores of the town of Dunedin, its surface an entanglement of scrub and flax, without a roof to cover or protect, or a known face to welcome them, and the dread uncertainty as to how or where provisions could be obtained until they could grow their own—the time of their arrival being near the beginning of winter—must all have tended to damp their enthusiasm.” In short, it was an experience that has been common to dozens of special settlement parties in New Zealand, both before that time and since. By and by Dunedin and Otago received a powerful stimulus from the discovery of rich deposits of gold in the Tuapeka District in 1861. The fame of Gabriel's Gully spread like wild-fire over the length and breadth of Australia, population streamed in by hundreds and thousands, and Dunedin, emulating on a moderate scale the example of Melbourne, grew rapidly in size and opulence, until

thirteen years ago it was the largest town in the colony. Within the last decade, however, Auckland has recovered her pre-eminence, and bids fair to retain it. If not now, therefore, the most populous city of New Zealand, Dunedin, at any rate, yields to none other in architectural effect. Indeed, it possesses within a circumscribed space a greater



THE ROBERT BURNS STATUE, DUNEDIN.

number of imposing buildings than any other town in the colony. A few have already been indicated, and, as the visitor advances from Knox Church along George Street to the immediate centre of business activity, others will come into view. George Street ends by expanding into the Octagon, an open reserve whose shape is suggested by its name, and consisting of a number of grass-plots dotted with trees, intersected by narrow asphalted walks, and ornamented with a statue of Burns, which represents the poet seated in an easy posture and with head uplifted as though wrapt in meditation.

Within the octagonal limits of Moray Place is quite a collection of fine structures, among which the chief place must be assigned to the Town Hall, a handsome-pile consisting of a basement and two upper storeys, with cupolas at the corners, and, springing from the centre, a

tower of four stages, the first faced, with the dial-plates of the town clock, the second being the bell-tower, the third bearing a small railed enclosure offering a capital prospect, and the last stage finishing off with a flag-staff. Within the bounds of Moray Place stand also the Young Men's Christian Association's new building, St. Paul's Anglican Church fronting Stuart Street, and the Jewish Synagogue, as well as First Church. At the corner of Dowling Street is the Garrison Hall and the Lyceum. On the seaward side, the Bank of New Zealand occupies one of the corners of Princes and Rattray Streets, with an attractive edifice built of Oamaru and Port Chalmers stone, and at the opposite corner stands the Colonial Bank. Midway between the two corners of these streets is reared the Cargill Monument, furnished with drinking fountains. The Colonial Bank is flanked on one side by the Post Office, and on the other, or nearer, side by the Telegraph Station. This is the very heart of the city. It is also the dividing point between the old and the new portions of Prince's Street. The part already described is narrow, with extremely contracted footpaths, and with a gradual slope. The remainder of its length southward is spacious in width, as becomes the leading avenue of business in a metropolis, and level withal. At this point also it is ornamented with two of the handsomest hotels in the colony—the Grand Hotel, a four-storey pile just opposite the Monument, and Wain's, another four-storey



MILFORD SOUND.

structure some little distance beyond. The thoroughfare striking up the hill round the corner of the Grand Hotel is High Street, one and a half miles in length, along which a branch tram-line, worked by cable, extends to the borough of Mornington. Nearer the harbour stand the fine imposing offices of *The Otago Daily Times* and *The Evening Star* newspapers, the Union Steam-ship Company and the Otago Harbour Board. The Queen's Theatre is in Prince's Street, and another and larger one, the Princess's, is situated a short distance up High Street. At the southern end of Prince's Street lies the Southern Recrea-



THE DUNEDIN TOWN HALL.

tion Ground, at the seaward side of the thoroughfare, with the Caledonian Ground at its back, and, on the opposite side of the street, the Southern Cemetery, the largest necropolis of the place.

Holding on his way through the borough of South Dunedin, towards the ocean beach, the visitor soon arrives at the borough of St. Kilda, and at length reaches the Forbury Race-course, where the Dunedin Jockey Club carries out its periodical meetings, and where the annual contest for the "Dunedin Cup" takes place amid accessories that distantly remind one of the "Melbourne Cup." Horse-racing is a passion with New Zealanders, and nowhere else in the colony does it so overmasteringly dominate all other sports as in the capital of Otago. Over the sand-hills which skirt the entrance, one may pass by a few steps to the magnificent ocean beach, through which it is fondly hoped a canal may some day be cut from the Pacific straight through to the harbour of Dunedin. The two prominent headlands which bound either side of the beach are each crowned by a battery of guns to repel any attempt at a hostile landing from the offing. Seaward there is nothing to break the level horizon of the ocean, while as a holiday resort the beach is not to be excelled. It is a heritage for which the people of the city may justly feel thankful. The railway extends as far as Anderson's Bay, the nearest point of the Peninsula, and thence one may prolong a pleasant walk along the fore-shore opposite Dunedin to Portobello, returning over the crest of the Peninsula Hills, from which some enchanting bits of scenery meet the eye. From the Southern

Cemetery the road dips to Caversham, about the most populous of the suburban boroughs, whence it is not far to Green Island and its collieries.

Retracing his steps to the city, a trip up the cable tram-way will take the traveller to the heights of Roslyn. As he passes York Place, a reserve of green sward containing a white obelisk will arrest his attention, and an inquiry will elicit the information that it was the primitive cemetery of the place, and that the stone records the names of the very early pioneers whose remains were there laid away to rest. Roslyn is a breezy and picturesque little suburb, nicely planted with trees, adorned with charming villa residences, and offering to the visitor a comprehensive panorama of the entire district. Beyond it the land slopes downward to the Kaikorai Valley, the seat of several important manufactories, amongst them being the branch mills of the Mosgiel Woollen Company. Two miles farther on stands Flag-staff Hill, from which a splendid prospect is to be obtained. Returning from the excursion, the traveller penetrates to the city through the Town Belt, a broad zone of timber, which extends along the slopes of the hills above Dunedin, completely engirdling it inland, and forming a well-defined belt of division from the suburban boroughs upon the crest of the hills.

It was from a point of the Belt between Roslyn and Maori Hill that a vigorous writer drew the following graphic sketch of Dunedin and its environs:—"Yonder rolled old ocean, bluer than the sky it reflected, white-tipped here and there with feathery crests of waves, petulantly foaming near the obstinate rocky islet that lay in by the beach, and was indifferent alike to storms and smiles; and yonder stood the fair high hills of the Peninsula, tinted and beautified by the warm bright sunlight. Westward lay the pretty villa-built townships of Melrose, Nevada and Roslyn, rendered picturesque by the frequent patches of dark green foliage; and nearer, and all around, fair Dunedin city itself, with its manifold slender spires and myriad bright-looking buildings—Knox Church here and First Church over yonder, suggestive, in their graceful delicate architecture, of fairy work rather than the labour of man. Right below beamed Pelichet Bay, smooth and azure, with tiny white-sailed craft skimming its surface like birds. North-east was Manuka Hill, clothed in dense luxuriance of bush, and a little beyond, lo! God's acre, with its narrow green mounds and pale stone record. Farther east the picturesque diminutive township of Opoho. Below that, pretty North-east Valley. Nearer ran the water of Leith musically over its pebbly bed much hidden by bridges and tall buildings, till it won a way down by the Botanical Gardens. Quite close stood forest-clad Pine Hill, and from there the eye glanced instinctively over to Flag-staff, a group of mountains about whose bleak and unresponsive peaks amorous white clouds continually creep, and cling, and nestle in misty adoration."

The people of Dunedin value their extensive recreation reserves very highly, and well they may, for the preservation of the Town Belt secures to the future inhabitants breathing spaces within easy reach of every part of the city. The charming admixture of warehouse, dwelling and garden is what specially excites the admiration of Old World visitors to New Zealand cities. The gardens adorned with trees richly evergreen, surrounding the detached cottages that make up so large a part of these colonial centres, add more to the urban beauty of which the land may boast than any pretensions to architectural excellence, and give the cities a distinctive character which even to the



THE CARGILL MONUMENT, DUNEDIN.

Australian visitor affords a pleasant change from the depressing monotony of the miles of brick and mortar that line the streets in Sydney and in Melbourne.

On the whole, the cities of New Zealand are very well endowed with public reserves, a fact that testifies to the foresight of the founders. But the public guardians of these reserves have not always displayed equal foresight. In Dunedin, a committee had to take action in the Supreme Court to compel the removal from the Town Belt, and other reserves, of structures which, with the consent of the governing body, had been illegally erected upon them to the exclusion of the public, for whose recreation the reserves had been set apart. One difficulty that arose in connection with the management of New Zealand public domains was the raising of funds to maintain cricket grounds, and to grant the use of public recreation reserves for matches at which a charge could be made. This matter was finally settled by Parliament passing an Act empowering the governing body to authorize a charge on not more than ten days in any one year—due notice being given by advertisement; and certain public holidays, upon which it is presumed the reserves may be in special request for purposes of general recreation, are absolutely exempted from choice as days upon which a charge may be made. This Act has worked very well. Revenue to maintain cricket grounds is also sometimes obtained by allotting wickets at a fixed charge to the various clubs on Saturday afternoons. By these means suitable provision has been made for cultivating the English national sport without detriment to the public interests, although there are also well-kept practice grounds in the possession of private clubs.

Descending the rest of the hill, by way of Rattray Street, we soon reach the site of St. Joseph's Roman Catholic Cathedral, when once more the Town Hall comes into immediate view, and the sight of it reminds us that the elective Corporation to which the burgesses entrust the management of the civic affairs, undertakes a wide range of duties. In addition to fulfilling the regular and normal functions of municipal government, the Dunedin City Council supplies both gas and water to the citizens, looks after the public baths, and maintains a paid fire-brigade; while the precautions against the ravages of fire are rendered still more effectual by the existence of alarm-bells, besides sixteen electric fire-signal boxes in various parts of the city. There are two separate sources of water-supply, so that the probable needs of the future have been studied and provided for in good time. The older supply is drawn from the head sources of the Water of Leith.

From the northern end of Great King Street, the road follows the windings of the shallow Leith to Woodhaugh, notable for its mill and paper-works. Turning off at this point up a small lateral valley, the visitor soon makes the Reservoirs, forming a series of placid-looking lakes, confined within angular limits, faced with powerful masonry. In order to penetrate to the Water-fall, one must return to the main road and plod along up the valley for two miles farther, when Nicol's Creek opens out to the left. A slippery scramble along its fern-lined banks brings the tourist at last into the presence of a glorious little cascade. The newer and larger reservoir is situated on the banks of the Silver-stream, this second water-works scheme having been successfully completed in 1882. Dunedin also possesses its clubs, its Benevolent Institution, its Industrial School, a strong volunteer force—embracing artillery, naval, cavalry, engineer and rifle corps—

its Telephone Exchange, several foot-ball and cricket clubs, lawn tennis, curling and bowling clubs, its Choral Society, and similar institutions. The Lunatic Asylum is situated at Sea-cliff, eighteen miles out of Dunedin, and is said to be the finest of the kind in the colony. The magnitude and variety of the manufacturing industries of Dunedin attest the energy and enterprise of the citizens. At one of the engineering establishments, that of Messrs. Kincaird, M'Queen & Co., several iron steamships have been built, one of two hundred tons; and a monster dredge, capable of raising hard clay from a depth of thirty feet at the rate of a hundred tons an hour, was built to the order of the Otago Harbour Board. Thirteen dredges have been turned out from this establishment. The firm recently constructed a complete plant for the manufacture of Bessemer steel, which has been commenced by Messrs. Smellie Brothers, at Burnside. In another of the foundries of



THE ROMAN CATHOLIC CATHEDRAL OF ST. JOSEPH'S.

Dunedin (that of the Messrs. Burt), a speciality is made of manufactures of copper, brass and lead; about one hundred and fifty men and boys are constantly employed at these works. The making of lead pipes and chandeliers, electric bells, and various descriptions of electro-plated goods, affords occupation for a large number of hands and an extensive plant.

To Otago is due the credit of establishing the first completely successful woollen mill, the Mosgiel Factory, which was started in 1871, in consequence of a bonus of one thousand five hundred pounds offered by the Provincial Government of that day. A complete plant was imported from Scotland by Mr. A. J. Burns, to whose indomitable energy the success of the enterprise is due. Skilled workmen accompanied the machinery to the colony. The Company have now a capital of fifty-six thousand pounds; they have accumulated a reserve fund of nineteen thousand pounds, and written twenty-seven

thousand pounds off their plant account, besides paying yearly dividends of from six to ten per cent. They have spent eighty thousand pounds on plant and buildings, and employ four hundred hands. This very successful factory, which has established a reputation for its manufactures all over Australasia, has been the pioneer of many other woollen-mills. In fact, all the chief centres of population, moved by a spirit of emulation, have followed the example of Dunedin. In Otago, besides the Mosgiel factory, there is a woollen-mill at Oamaru, and a worsted and woollen mill at Roslyn. The latter, which is owned by Messrs. Ross and Glendenning, employs between four hundred and five hundred hands, and uses up wool exceeding the produce of a hundred and twenty thousand sheep. The manufacture of clothing has given rise to another mammoth factory in Dunedin, Messrs. Hallenstein Brothers' establishment, which has twenty-six branches in all parts of the colony, being the largest of its kind in New Zealand. The business of manufacturing chemists has been developed by the New Zealand Drug Company, whose head-quarters are at Dunedin. The community has already laid the substantial foundations of manufacturing prosperity, and the great smoke-stacks which may be seen rising in various parts of the city are monster signal-posts reared by industrial energy—which even now excite in the mind of the beholder visions of a future Birmingham or Sheffield, rivalling their Old World prototypes—arising on a site where forty years ago stood the primeval forest.

The tourist who desires to visit the famous lakes of the Otago District must take the southern train from Dunedin, and journeying some six or seven miles out and crossing the broad and fertile Taieri Plain, which abounds with the signs of agricultural operations and of advancing settlement, he will note to the right low hills devoid of timber, with the Taieri River meandering towards its outlet near the ocean beach; while, stretching far away to the left, a rolling prairie, bounded on the horizon by ranges of hills, spreads before his eye, and in the middle distance lie the townships of Mosgiel and Outram, nine miles apart, and connected by a branch line of railway. Mosgiel is noteworthy as being the head-quarters of the Mosgiel Woollen Company, whose mills of brick and cement are equipped with the most improved machinery, and lit up with the electric-light. Sixteen miles farther on through this bountiful valley, an ample sheet of water, marged in parts with sedges affording promise of game to the sportsman, breaks upon the view, and Lake Waiholo is reached, and here the train stops in order that passengers may obtain refreshments. This Lake is a favourite resort for sportsmen in the shooting season. Ten miles more, and the train makes the cheerful and attractive little township of Milton, with its potteries, lime-kilns and flour and oatmeal mills, as well as coal-mines. It is said that the first white-ware manufactured south of the Line was turned out of these potteries, and its oatmeal is certainly to be met with in every town of the colony. Two miles beyond Milton, a branch line strikes off to the south-west, and terminates at Lawrence, the centre of the gold-mining district of Tuapeka. Twelve miles farther along the main line, and the traveller arrives at Stirling, whence a branch line penetrates to the Kaitangata coal-mines. From Stirling the route passes by a massive bridge across the Clutha, the largest river in the South Island, and draws up at the township of Balclutha. A long stretch of forty-seven miles lies between this place and Gore, a town in the district of Southland, formerly a separate province. Thence the



HARVESTING ON THE TAIERI PLAIN.

journey is made by way of the Southland Plains, past the town of Mataura to Invercargill, the capital of Southland, and distant one hundred and thirty-nine miles from Dunedin.

Invercargill is the most southerly town of all the Australias, and the manner in which it has been laid out indicates that those who projected the settlement were possessed with the idea that they were laying down the frame-work of a metropolitan city. In fact, we are given to understand that Invercargill was intended to be the capital of the colony, and had that intention been realized there is not the slightest doubt that it would have been quite a model metropolis, so far as design and architectural skill could compass that end. It is laid out in splendid rectangular blocks, and its magnificent streets are the widest in the colony. Instead of being cramped for room,



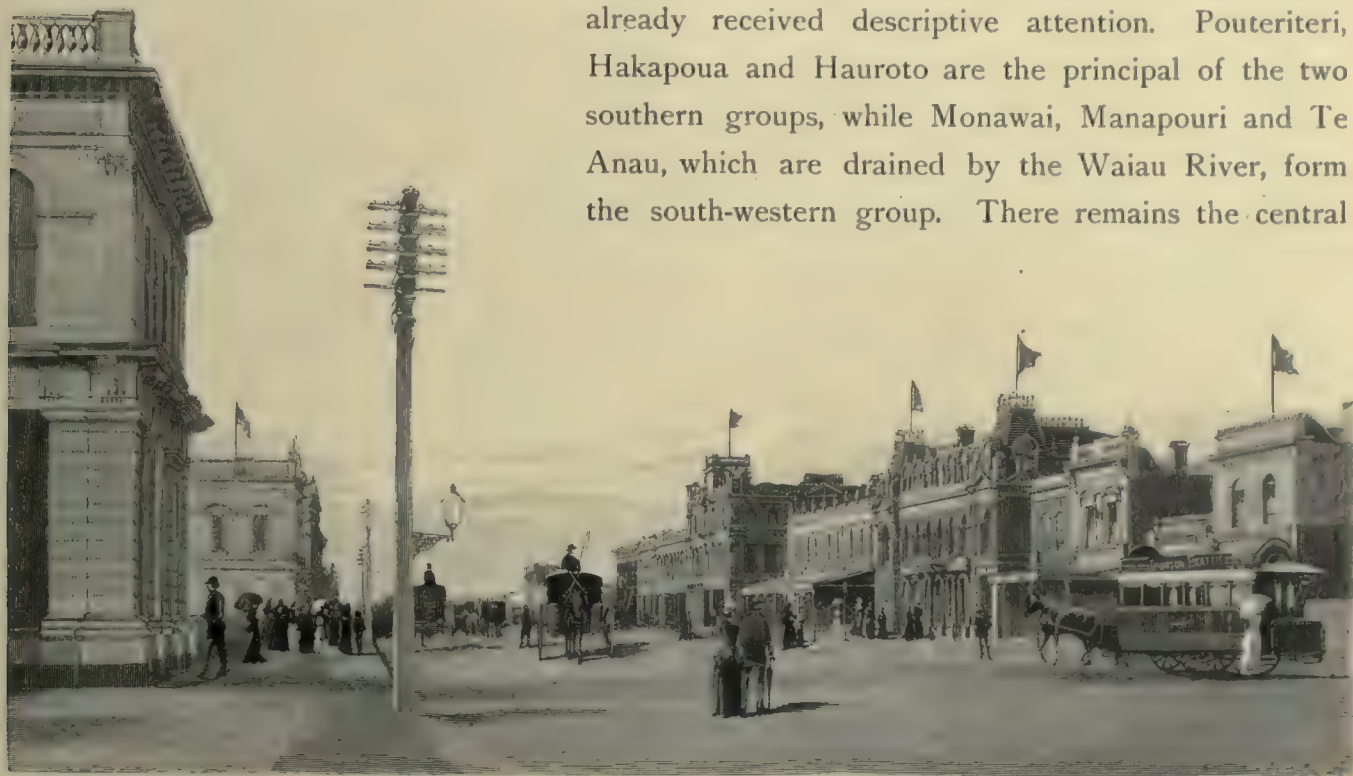
THE BLUFF.

the town has far more space than it can utilize for many years to come, and once outside the immediate business centres one feels quite solitary in these ample arteries with their comparatively few buildings. The principal streets, Dee, Tay and Esk, are graced with many handsome structures built of stone, and the planting of trees alongside the footpaths adds greatly to the effect of some of the thoroughfares. The city is built upon a plain, and is bounded on one side by the estuary of the New River, and on the other three by public reserves and gardens, forming, as it were, a complete line of circumvallation. But the town is rapidly extending beyond these limits, which, in course of time, will doubtless be found thrust into the midst of the business quarters. To the north lies the extensive reserve known as the Invercargill Public Park, of an area sufficient for a population a dozen times larger than that settled in this district. Part of the reserve is used as a race-course. Invercargill is lit with gas, possesses a semi-artesian water-supply, boasts a tram-service, and, besides being connected by rail with Dunedin, has branch lines radiating to Kingston, on Lake Wakatipu; to Seward Bush, Riverton, Orepuki and Nightcaps, and the shorter line to "The Bluff," which

is its port, and the last point of departure for steamers bound to Melbourne. "The Bluff" is situated at the mouth of the New River, seventeen miles south of Invercargill; it is a rather bleak little place, and does not give the visitor from over-sea a favourable first impression of New Zealand.

THE OTAGO LAKES.

From Invercargill the tourist may visit that very remarkable country to which is applied the vague and general designation of "The Lake District," and which comprises a chain of twelve lakes extending from the neighbourhood of Preservation Inlet, in the extreme south-west, to the head-waters of the River Rangitata, in the province of Canterbury. They are divided into five groups, of which the northern, or Canterbury group, consisting of Tekapo, Pukaki and Ohau, has already received descriptive attention. Pouteriteri, Hakapoua and Hauroto are the principal of the two southern groups, while Monawai, Manapouri and Te Anau, which are drained by the Waiau River, form the south-western group. There remains the central



DEE STREET, INVERCARGILL.

group, consisting of Wakatipu, Hawea and Wanaka, all drained by the Clutha River. The traveller's attention may be advantageously confined to the south-western and central groups, with more especial attention devoted to the latter. The first stage of the railway journey from Invercargill to Kingston, on the shores of Lake Wakatipu, may be said to end at "The Elbow," otherwise known as Lumsden, a township situated on the Oreti River, fifty miles north-west of Invercargill. It is the custom with most tourists to go right through to Kingston, but those who wish to make the acquaintance of Manapouri and Te Anau must diverge at "The Elbow" from the beaten track.

Hiring horses at "The Elbow," the distance between it and Takitimos may be traversed the same day, provided that Invercargill has been left by the morning train. From the Takitimos Hotel it is only a short ride of about ten miles to the shores of Manapouri, and five more up the valley of the Waiau to Te Anau. Manapouri covers an area of some fifty square miles, and is so cut up into bays, gulfs and arms, that it is said to be almost impossible to exactly determine its length and breadth. It is

nearly surrounded by mountains, the only open space being half-a-mile on its eastern side, where Surprise Cove marks the exit of the Waiau. From the eminence of View Hill, at this point, a delightful prospect is to be obtained. "No more charming scene could be imagined—the mountains sweep round in the shape of an amphitheatre, stepping back from the water's edge in tier after tier of beautifully wooded terraces. On the left, the Hunter Mountains run up some six thousand feet; on the right, the white towers of the Spire Peaks, seven thousand five hundred and eighty-seven feet, look down over the snowy heads of the Cathedral Peaks and the lower summits of the Kepler Ranges, while far away, between the west and north arms, Leaning Peak and Steep Peak watch the Lake and guard the pass to the west coast sounds. These mountains are covered with timber, and ridged all round above with snow, and below them in sylvan beauty, Manapouri wanders in and out in the most promiscuous manner among the jutting heads."

Te Anau, a few miles farther on, is the largest lake in New Zealand, measuring about thirty-eight miles in length, varying in breadth from one to six miles, and covering an area of one hundred and thirty-two square miles. Excepting twenty-eight miles of a shingly and scrubby flat on its eastern side, Te Anau is encompassed by "densely-wooded mountains, and the green sheen of the forest, crowned with the gleaming snow above, makes up a picture which for extent and loveliness is unsurpassed." Making the best of our way back to "The Elbow," we resume the train, and are soon transported over the remaining thirty-seven miles to Kingston, lying at the southern end of Lake Wakatipu. Here a smart little steamer awaits the arrival of passengers to convey them right on to Queenstown, which, if we compare Lake Wakatipu to the letter "S," occupies the bend half-way between Kingston and the head of the Lake. Wakatipu is fifty-two miles long, from one to three miles broad, and it covers an area of about one hundred and fourteen miles. It lies one thousand and seventy feet above sea-level, and its depth varies from one thousand one hundred and seventy to one thousand two hundred and forty feet. The bottom of the Lake, therefore, is below sea-level. The scenery between the two places is very striking. Towering ranges appear to hem one in upon every side on leaving Kingston. To the left lie the foremost peaks of the Eyre Mountains, and opposite Queenstown the Walter and Cecil Peaks thrust their lofty summits right through the clouds floating in the atmosphere. To the right extends the impressive range of the Hector Mountains, starting with "The Devil's Stair-case" and swelling up into the Remarkables, whose highest peak is Double Cone, seven thousand six hundred and eighty-eight feet high.

Queenstown is a most picturesque little centre, bulwarked at its back and sides by towering and sombre mountains, and smiled or frowned upon in front by the ample waters of the Lake, just as the prevailing mood happens to be tranquil or stormy. The place contains a town hall, a garrison hall, an athenæum, a free library, a Dominican convent and school, a State school, churches, banks and other buildings. There is also a public park, while the Esplanade affords a pleasant walk around the margin of the bay. The visitor may likewise walk or ride to the suburb of Frankton, the Shotover Gorge, the Hospital, and the Kawarau Falls, or drive to the mining settlement of Arrowtown by way of the Shotover and Lake Hayes—a lovely sheet of water about a



QUEENSTOWN AND LAKE WAKATIPU.

mile in each direction—returning thence by way of Miller's Flat. The best excursion from Queenstown is unquestionably that to the summit of Ben Lomond, and if the tourist be an expert Alpine climber, he will doubtless feel inclined to ascend its neighbour, Mount Bowen, as well. A bridle-track leads from the hotel to "The Saddle," from which may be seen, to the right and left respectively, Mount Bowen and Ben Lomond. The former is the easier of ascent, but the view from the other peak is far preferable. A little beyond "The Saddle," the mountaineer must tether his horse, and divest himself of all superfluous clothing in order the more comfortably to clamber up the steep side of the colossal giant. A moderately athletic person will gain the summit in about three-quarters of an hour, and once there a most extensive panorama amply rewards his exertions. "Turning his face to the east, his eye will catch Frankton and the long range of the Hector Mountains. The forward peaks of the Range, with their jagged edges, we know at a glance. They are the Remarkables, which seem to haunt us every-where. At their base sweeps round the Kawarau River, which a little way down is joined by the Shotover, then by the Arrow, and hurries on through the Carrick Ranges with its mass of dirty waters to meet and contaminate the Clutha at Cromwell. On the left bank of the River are spread out the wide plains of the Arrow. Lake Hayes glasses itself in the midst, surrounded with green fields, and flanked on the far horizon by the Crown Terraces rich with their ripening wheat and corn. Travelling northwards, the eye rests on the southern peaks of the Harris Mountains and the long stretches of the Richardson Ranges. Nothing can be more magnificent than the view in this direction. At the foot of Ben Lomond, westward from the Shotover Valley, there are multitudes of low round hills covered with bracken, and gradually increasing in height as they increase in distance. They lie in sloping ridges, 'rounded by old glaciers into long dark billowy swellings, like the backs of plunging dolphins.' In the ravines there are dense timber-forests, and here and there birch, pine and *manuka* climb their sides, like scattered armies, in broad green battalions, and at last, in the far horizon, the high summits crown themselves—peak after peak—in one long glory of eternal snow. Farther westward, at the head of the Lake, lie the Forbes Mountains, and on its remoter side the Humboldt and Thompson Mountains." Just at the foot of Ben Lomond, like a mirror set among the hills, nestles the little Moke Lake, with its copper-mine.

Another very attractive excursion is the twenty-mile drive, through the Shotover Valley to Skipper's, where a lovely water-fall may be seen, and where also one obtains a very good idea of the progress and magnitude of gold-mining operations in this part of the colony. The Rev. W. S. Green says:—"Wakatipu is amazingly beautiful; the only lake in Europe which can surpass it is Lucerne; but to see no more of Wakatipu than what can be seen by a trip to Queenstown and back is to see Lucerne and omit the Bay of Uri." From Queenstown the head of Lake Wakatipu may be reached by two routes, of which the one that proceeds by land along the eastern shore will be chosen only by those who are fond of "roughing it." The other and shorter route is by steamer. There are no less than seven peaks over eight thousand feet high, while the snow-line of the district may be drawn at a little over seven thousand feet. The forest-line reaches three thousand five hundred feet above sea-level. "Rounding Pigeon Island, the grandest scenery of Wakatipu opens full upon our view; a little behind us on our left,



THE KAWERA VALLEY

the Greenstone River, which flows in and out through a beautiful little lakelet—Rere Lake—cuts its way by the southern base of the Ailsa and Humboldt Mountains into the Lake. Facing the head of the Lake

the scenery is varied and magnificent. On the right, the Richardson Mountains—bare and desolate looking—weary the eye. But on the left the contrast is complete. The Humboldt Ranges gleam green in the

sunlight. Immense forests of timber clothe their sides down to the very water's edge, and climb away upwards until they reach the region of perpetual snow. Bald Peak and Mount Bonpland, eight thousand one hundred and two feet, look down upon us from their white thrones. Right in front, at the head of the Lake, the Forbes Mountains send down Mount Alfred like a wedge between the Humboldt and Richardson Ranges; while far away behind, Cosmos Peak (eight thousand feet), and Mount Earnslaw (nine thousand one hundred and sixty-five feet) and Mount Anstead, lift their white gleaming heads into the azure heavens."

Our immediate destination is Glenorchy, from which point there is a number of tempting excursions to be made, if one has but time to spare—to Paradise Flat, *vid* the Diamond Lakes; to Mounts Alfred and Judah; to Mount Earnslaw and Lennox Falls; to Kinlock and up the Dart River to the Route Burn; to Lake Harris, Hollyford Valley and Martin's Bay; and to the Rere Lake. That to Mount Earnslaw and the Lennox Falls should not be missed, whatever may defeat one's intentions regarding the others. There are two routes to the glaciers of Mount Earnslaw. One runs for eight miles up the Rees Valley to the first spur of the Mountain. This was the route followed by Mr. Green, when he unsuccessfully attempted the ascent in 1882. The other involves a ride of twenty-five miles up the same Valley, whence the track for eight miles farther skirts the base of the Richardson Mountains. Upwards of twelve miles more, and "a wide open plateau is reached, bounded on the left and in front by high forest-clad mountains, and crowned on the summit with everlasting snow. The one on the left is Earnslaw; those away in the front are Mount Anstead and Mount Tyndal." A short ride beyond this point, and we are on the saddle of the Mountain. Writing of his trip, Mr. Green says that after mounting to a height of two thousand feet, his party "turned round a shoulder to the left and came into view of Earnslaw, its summit standing out clear against the starlit sky, its snows just faintly illumined by the first rays of dawn. Deep down in the gorge before us its great glacier lost itself to view in the gloom of night, but the sound of the torrent was distinctly audible, its roar now swelling, now dying away with the rise and fall of the gentle breeze. . . . The trough-shaped ravine before us was more Swiss-like than any valley we had seen in New Zealand; the icy slopes of Earnslaw towered at its farther end; its sides were clothed with fine forests of black and white birch, and the glacier torrent in its bottom found an exit towards Diamond Lake through a deep cleft near to which we had commenced our ascent. . . . As yet the sky to the northward and eastward was clear, and the view over the mountain peaks towards Mount Aspiring was very fine. Immediately at our feet the ridge fell away in precipices to the Rees River, which all but monopolized the narrow bottom of the deep defile over two thousand feet below us; the only signs of human life being at one spot where some men had conducted a water-course along the opposite hill-side, towards a gold-working in a quartz-reef, which was faintly visible in the depths below."

It is only two miles from the base of Earnslaw to the Lennox Falls, named after Lord Walter Lennox, in commemoration of his visit to them. There are three falls, and to one of them has been given the quaint title of "The Widow's Tear," for the reason that it vanishes six weeks after the snow begins to melt on the sides of the



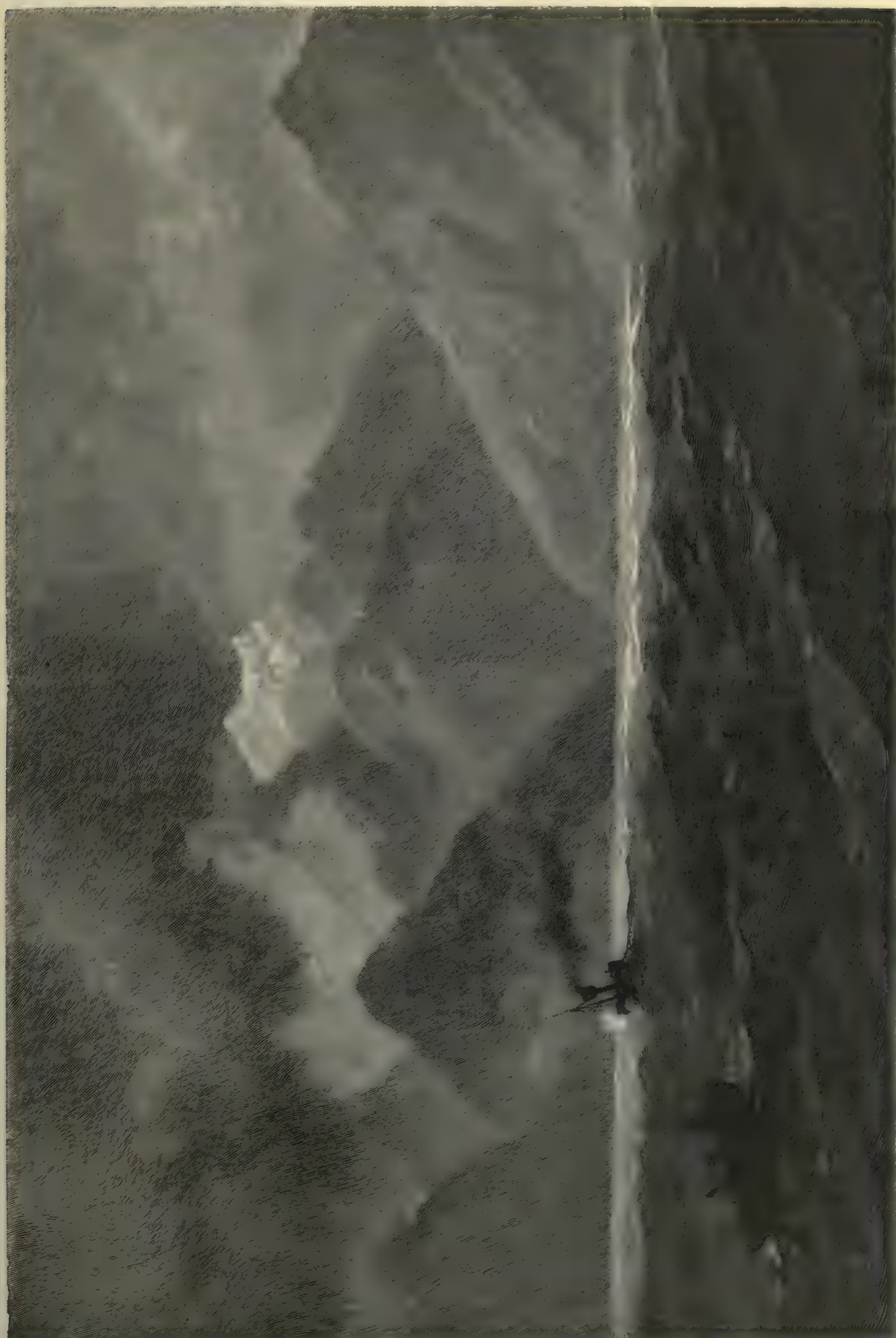
THE ASCENT OF BEN LOMOND.

mountain whence its waters spring. The height of the Falls ranges from one hundred to three hundred feet, and their breadth from fifteen to forty feet. Two other lakes of great interest that should be visited before quitting this strangely romantic region, are Wanaka and Hawea, the former of which is, in some respects, the most fascinating of all the lakes. The route to Wanaka is by way of Arrowtown to Pembroke, some fifty-nine miles, passing on the road either Cardrona or Cromwell, both mining townships. Pembroke consists of a few houses standing on the shore of Wanaka, but it is the point from which the steamer starts to make its weekly tour of the Lake. The chief points to be visited are Glendhur, the Matukituki Valley and Mount Aspiring—one of the four highest peaks, and probably the most extensive snow mountain, in Australasia, except Mount Cook—Mounts Iron and Grandview, Brown's Bay, and the head of the Clutha River. But the trip, *par excellence*, is that by steamer round the Lake. "From the shore of Lake Wanaka," says Mr. N. Blair, C.E., "it is possible to see about thirty named and measured peaks, from four thousand to nearly ten thousand feet high, and a countless number that have been neither named nor measured." The height of Mount Aspiring is nine thousand nine hundred and forty feet. Lake Hawea is only about six miles distant from Pembroke, and there is a hotel near its shores. It is the smallest of these lakes, being about fifteen miles long, three miles broad, and of a general depth varying from nine hundred to one thousand two hundred feet, or as low as four hundred and fifty feet near the head. The finest scenery in this enchanting neighbourhood is at its head.

THE WEST COAST SOUNDS.

Since 1887, when the Union Steam-ship Company first projected a holiday trip to the Sounds, on the western coast of Otago, it has been continued as an annual fixture, and of late years so highly has the excursion risen in repute that it has been found necessary to make two trips annually at an interval of a few weeks apart. One of the finest steam-ships of the Company sails from Dunedin for the Sounds during the month of January, and for those who desire to be thrilled, delighted and impressed by the sublime, lovely and majestic in Nature, no better opportunity will present itself. For a distance of one hundred and ten miles, the western coast of Otago consists of towering precipitous mountains, thickly clad with foliage of the most vivid verdure, carrying their perpendicular fronts right out into the depths of the ocean, and with their iron-bound sides penetrated by numerous fiords and sounds, which would seem to have been laboriously chiselled out of the impenetrable adamant by a race of Titans, by the side of whom those of the Grecian myth must sink into the proportions of pigmies.

The scenery of this west coast is absolutely unique, and incomparably grand. To imagine that the base of the frowning heights is submerged with a sheer descent into the ocean without throwing out any submarine slopes that can be grappled by a vessel's anchor, are a chain of half-submerged Himalayas, and that the deep and narrow fissures on their sides, expanding after many a tortuous passage into lovely sounds, mark the upper limits of beautiful and sequestered vales now sunk far down beneath the wave, is not to give unbridled rein to a fantastic conceit, but to realize what geologists assert to be actually the case. They may differ as to whether the



THE HEAD OF LAKE WAKATIPU.

process of subsidence is still going on or not, but they are agreed that it has taken place, with the result we have mentioned. So great is the depth of these land-locked lakes which slumber in perfect stillness, that soundings can rarely be obtained under eighty or one hundred fathoms. The woody islets which gem their bosom partake of the inaccessible steepness of the shores. They appear to be, and most probably are, the peaks of submerged mountains. Cascades and water-falls course down the fortress-like sides of the craggy shore, some with the noise of dashing torrents; others winding through the dense bush-like strands of gossamer, and dissipating their mist of spray-foam as they plunge over the lip of some fearful abyss. The rich and profuse vegetation is yet another feature the beauty of which cannot be exaggerated. It is here alone that the torrid and the frigid zones join hands, and semi-tropical vegetation may be found close to the eternal snows.

There are thirteen of these sounds between the parallels of forty-four and forty-six degrees south latitude, and they penetrate inland for distances ranging from six to twenty miles. The most southerly of the series is Preservation Inlet, and then follow in regular order as we proceed north, Chalky or Dark Cloud Inlet, Dusky Sound, Breaksea Sound, Dagg's Sound, Doubtful Inlet, Thompson Sound, Nancy Sound, George Sound, Bligh Sound, and then, most famous for its scenery, Milford Sound.

Milford Sound is the most northerly of the series, and if the traveller has been startled and bewildered by what he has already seen, he will be now perfectly amazed and profoundly impressed. It is here that the sublimity of Nature attains its climax. Although the eye detects no break in the iron-bound coast, we are close to the portals of a sound which takes rank as one of the greatest wonders of the world. In the words of the official report of the survey:—"The mountains by which it is surrounded are, with the exception of Mount Cook, the highest on the coast, and its narrow entrance, apparently still more contracted by the stupendous cliffs which rise perpendicular as a wall from the water's edge to a height of several thousand feet, invests Milford Sound with a character of solemnity and grandeur which description can barely realize." After passing Anita Bay, we steam straight for what appears to be a mere fissure in the gigantic embattled phalanx of cloud-piercing mountains, with Mitre Peak, three thousand five hundred and sixty feet, on one side, and Pembroke Peak, six thousand seven hundred and ten feet, on the other, standing forward, as captains of the host, to dispute our petty intrusion. We are at last within the funnel-shaped entrance to the Sound, and passing within the adamantine portals at its inner end—only a quarter of a mile wide—we might, with but a slight effort of the mind, imagine ourselves in the mysterious under-world.

Here surely we have cut ourselves off for ever from the commonplace affairs of every-day life, and are swiftly, and, so to speak, profanely entering a region of weird solemnity, and sombre and awful impressiveness. How vast and imposingly sublime is the scale on which everything is reared! Mountains rising sheer from the unfathomable depths of this silent sea, soaring upward beyond the clouds that invest, as it were, with fleecy zones the enormous bulk of their waists; forest vegetation of perennial verdure clothing their lower limbs, and magnificent water-falls angrily foaming down their rude flanks. Our wonder and awe deepen and intensify as we proceed upon our way. The



THE WATER-FALL NEAR SKIPPER'S.

lofty pitch of the Stirling Fall is right before us. We mark its waters issuing free from the dizzy escarpment of a mountain, and then, uniting in loving embrace for the final plunge, hurling themselves in unbroken volume four hundred feet through space, to

the surface of the Sound, which throws them back in fierce recoil of foam and shimmering spray. Under the frowning lee of Mount Kimberley, looking down upon us from his precipitous height of two thousand five hundred feet, and turning the tail of his couchant sentinel, "The Lion Rock," we pass slowly into Harrison Cove, and find ourselves at the immediate base of Pembroke

Peak. Its glacier-laden sides tower upward, and upward, until the wearied vision can penetrate no farther, and the mind is fain to conjure



THE WILD-FLOWERS OF NEW ZEALAND.

up the counterfeit presentment of the solitary Peak that pierces far above the cloud-line into the ever-radiant sunshine. A deep and winding valley trends its sinuous way from the side of the Mountain to the head of the cove. On every side giddy heights and eternal glaciers confront the eye.

Opposite Pembroke Peak, the magnificent form of Mitre Peak rears itself into that strange double summit which suggests the episcopal insignia.

It and its neighbours, the saddle-

backed Llawrenny Peaks and Mount Phillips, gaze down upon a dome-shaped mountain of metallic aspect on the other shore, and upon snow-crested peaks on every hand. Right in front, and forming the head of the Sound, stands Sheerdown Hill,



THE ENTRANCE TO MILFORD SOUND, ON THE WEST COAST.

lifting its snowy head four thousand feet above the sea, and parting with its immense proportions the wooded valleys through which the rivers Cleddau and Arthur career to the sea. It is fit associate for the neighbouring peaks of the Barren Ranges, which rise to an altitude of five thousand one hundred and twenty-five feet, and from one of whose lower ridges the lovely Bowen Falls precipitate themselves into the Sound. No known cascade in this marvellous region can compare with them. Springing clear of a rocky ledge on the mountain side, the stream alights, at a distance of seventy feet, upon a craggy projection, and thence with redoubled violence plunges downward in one broad sheet through a sheer descent of four hundred and seventy feet, churning up the waters at its base into a tornado of foam and spray. The hoarse murmur of the falling torrent is the only sound that breaks the heavy slumberous stillness of this solemn place. As we recede once more from the Falls, even this dies away, and an awful silence succeeds. Still another water-fall has more recently been discovered, and named after the discoverer the Sutherland Falls; wonderful tales have been told of its height and volume, but an official report has not yet been offered on the subject.

And here we terminate our description of a country whose magnificent scenery will for ages to come evoke panegyrics from writers, and incite artists to attempt the impossible feat of reproducing Nature in all her grandeur and loveliness; a country whose invigorating climate, splendid position, generous soil and boundless resources indicate that it is destined to be the home of a free, powerful and enlightened nation, to which may with justice be applied the Latin motto, "*Vires acquirit eundo.*"





SUVA, ON NAVITILEVU ISLAND, THE CAPITAL OF THE FIJIS.

INSULAR AUSTRALASIA.

NEW GUINEA.

NEW GUINEA has an area of three hundred and six thousand square miles. It is about one thousand four hundred and ninety miles long, and four hundred and thirty broad, in its widest part. It is separated from Australia by Torres Straits, which are only eighty miles across. The shallowness of the water shows that at some time in the world's history it was united to Australia, the average depth being only eight or nine fathoms, while the greatest does not exceed twenty fathoms.

The form of New Guinea is very irregular. It possesses a north-western and a south-western peninsula, with a large central mass. The first appearance of the Island from almost every point of approach, is that of a bold mountainous country. The Charles Louis is the highest range on the Island, attaining a height of nearly seventeen thousand feet. The Owen Stanley Range, with the picturesque Mountain of the same name, and Mount Yule, are fine landmarks, visible far out to sea. The mountains of the north-west peninsula are: Mount Arfak, ten thousand feet high, and a ridge some one thousand two hundred feet high, at the head of the MacCluer Inlet; while the whole of the peninsula south of the Inlet seems to be a mass of mountains. New Guinea has a coast-line of about four thousand four hundred miles, comprising innumerable bays and inlets. Towards the north-west end, the Island is almost cut in two by

the deep MacCluer Inlet. Another indentation to the south almost entirely insulates the great district of Onin. There are many good harbours in various parts of these extensive coasts. In the Dutch Territory, on the southern side, are many harbours known to the Malay traders, who for the last two hundred years have traded along the



A WOMAN FROM THE SOUTH CAPE, NEW GUINEA.

coast. On the north are Dorey Harbour, Humboldt Bay, Astrolabe Bay, Huon Gulf, Collingwood Bay and Goodenough Bay. On the south-east coast is a succession of good harbours, and the numerous islands off the coast afford good shelter and good anchorage. The rivers are very numerous, especially on the south-east coast, and bring down enormous quantities of fresh water, which retain their freshness many miles out at sea. With the exception of the Fly, the navigability of these rivers has not been tested beyond a few miles. Travel in the interior of New Guinea is rough and difficult. No easy-chair geographer will ever explore the hills and valleys of this tropical Island. Of the great centre of the Island nothing really is known, but the north-west part and the south-east peninsula present some of the most

difficult travel in the world. The scenery in many places is romantically picturesque and exceedingly grand, consisting of mountain ridges richly clothed with luxuriant vegetation.

The first European visitors to New Guinea were the Portuguese, in 1521. It was probably named by Ortis de Retes in 1545, who so called it "from its resemblance to the Guinea Coast, and from the similarity of the curly-headed black natives to the denizens of tropical Africa." A letter written by Luiz Vaez de Torres, in 1606, was found in the Spanish archives at Manila, on its capture by the British in 1762, in which he describes his voyage to the New Guinea Coast, and speaks of having taken possession of his discoveries for the King of Spain. De Bougainville visited the coast in 1768; *H.M.S. Pandora* touched there in 1792, and two of the East India Company's vessels followed in 1793. Forrest, of the same service, came in 1774, Captain Bligh in 1792, D'Urville in 1827; and in 1828 the coast from one hundred and thirty-two degrees forty-five minutes to one hundred and forty-one east, on the south side, was proclaimed Dutch territory. In 1827, a small Dutch settlement was formed at Triton Bay, but it was soon abandoned.

New Guinea is one of the few remaining countries of the world practically unexplored. The centre of the Island is still a great *terra incognita*. All that explorers have hitherto done has touched only the outer fringe of this interesting country. About the year 1824, the French naturalist, Sesson, visited New Guinea in the surveying ship *Coquille*, but he did not stay long, and made but small collections. In 1858, Mr. Alfred

R. Wallace, F.R.G.S., author of the "Malay Archipelago," and other works, realized a long cherished wish, and landed on the north coast of New Guinea. He lived at Dorey for three months and a half, and was the first European who ventured to live alone and unprotected among the natives of New Guinea. He had some Malay servants, and large collections of insects and birds were made through them, but Mr. Wallace himself was prevented by sickness from travelling or collecting much. In 1861, he sent an assistant, Mr. Charles Allen, to Sorong on the north-west extremity, whence he penetrated fifteen or twenty miles into the interior. Dr. N. de Miklouho Maclay, the Russian savant and scientist, landed at Astrolabe Bay in 1871, and lived in that neighbourhood altogether four years. He was an enthusiastic ethnologist, and chose to live among the natives that he might become acquainted with their habits, and thoroughly study the people themselves. In the north-west peninsula, the only travellers who have penetrated at all into the interior are Signor D'Albertis, Dr. Beccari, Von Rosenberg and Dr. A. B. Meyer. The Arfak Mountains have proved the most fruitful field to the explorer and naturalist. In 1872, Signor D'Albertis penetrated some twenty miles inland to a village called Hatem.

He lived here, at an elevation of three thousand five hundred feet, for a month, and made a very large and valuable collection of insects, birds and plants of this mountain region. Dr. A. B. Meyer was a most successful traveller and explorer. He is one of the exceedingly few men who have actually crossed New Guinea. He succeeded in doing this at the head of MacCluer Inlet, the narrowest part of the Island. He had to cross a mountain range two thousand feet high, and was four days on his journey, although the actual distance on the chart is not more than forty miles. He explored the whole coast-line of Geelvink Bay, and



A PORT MORESBY NEW GUINEAN.

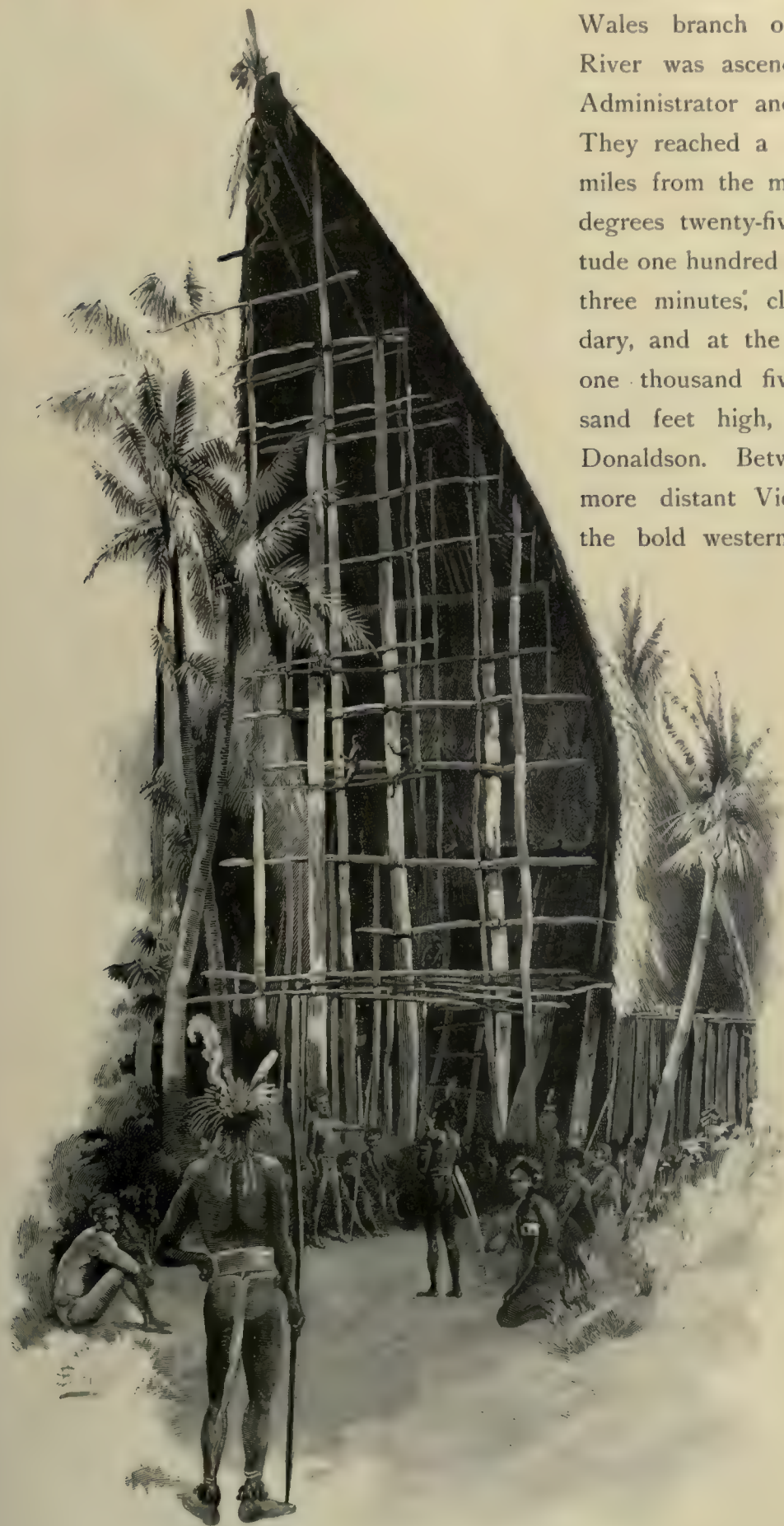
many of its islands, and after crossing to the southern side went to Dorey, and from there ascended the Arfak Mountains to a height of six thousand feet. Dr. Beccari, two years later, ascended the same Mountain to a height of six thousand seven hundred feet. He lived a month on the Mountain, and made very large collections in botany and zoology. He travelled over a large area, visiting several mountains east of Sorong, and explored several places on the coast, and all the islands in Geelvink Bay. More recently, the south-east peninsula has occupied the largest share of attention from travellers and naturalists. Signor D'Albertis took up his quarters at Yule Island, in 1875, and made several excursions upon the main-land opposite. He made very large

collections, especially of birds, many of which were first obtained and named by him. In the meantime, the missionary steamer, *Ellengowan*, under the command of Captain J. Runcie, had ascended the Baxter and Fly Rivers. Signor D'Albertis was a passenger on board the *Ellengowan*, as guest of the missionary, Mr. Macfarlane, when she ascended the Fly. The success of that voyage inspired him with the resolve to go still farther up that noble River, and explore thoroughly the country through which it passed. He obtained the loan of a steam-launch, the *Neva*, from the New South Wales Government, and in her he made two voyages, steaming over four hundred miles—in a direct line, about two hundred and twenty miles—but failed to reach high land. It is doubtful, however, whether it was the main stream that they explored. Signor D'Albertis was not able to land often, nor yet to penetrate far from the banks of the River. The missionaries of the London Missionary Society, Messrs. Macfarlane, Chalmers and Lawes, have made many journeys and voyages on the coast since 1872, the accounts of which have from time to time been published. In 1875, Mr. Lawes visited the inland tribe of Koiari at Munikahila, about twenty miles from Port Moresby, and was accompanied by Mr. Octavius Stone, who resided three months at Port Moresby, in the Mission compound. Mr. Stone had Mr. Lawrence Hargrave with him, and also two good collectors, Messrs. Petterd and Broadbent, who were originally on the staff of the Hon. W. Macleay in the *Chevert*. The collection of birds made by these gentlemen for Mr. Stone was the largest that had ever been sent from the south-east coast. About the same time, Dr. James, an American, settled at Yule Island. Before he had been long there he was murdered, with Charles Thorngren, on his vessel, the *Mayri*, by the natives of Paitana, in Hall Sound. An exploring voyage was made along the coast, from Port Moresby to Milne Bay, in the steamer *Ellengowan*, by Messrs. Lawes and Macfarlane, in April, 1876, and many new harbours and rivers were discovered. Early in the following year, Mr. Lawes discovered the large river which falls into Hood Bay, and named it the Kemp-Welch. Mr. Chalmers, at various times in 1878 and 1879, made long journeys into the mountain region inland of Redscar Bay, Port Moresby and Hood Bay. The farthest point reached by him was nine degrees two minutes south latitude, and one hundred and forty-seven degrees forty-two minutes east longitude. No traveller has opened up such large areas of previously unknown country, and no one has so thoroughly won the confidence of the people. "*Tamate*," the name by which Mr. Chalmers is known to the natives, is every-where a pass-word of safety and good-will. Some account of his travels will be found in the two books written by him, "Work and Adventure in New Guinea" and "Pioneering in New Guinea." In 1883, Captain Armit arrived at Port Moresby, as representative of the *Argus* newspaper, accompanied by an American geologist, Professor Denton; he travelled in a north-easterly direction about sixty-five miles from Port Moresby, but was compelled by sickness to return, Professor Denton having died on the journey. About the same time, Mr. Ernest Morrison, of the *Age* newspaper, explored in a north-westerly direction, but after two months' hard travel, was attacked by the natives, and compelled, wounded and half-starved, to return to Port Moresby. Mr. A. Goldie is well-known on the south-east coast as a traveller and explorer during the seven years from 1876. Mr. Charles Hunstein and Mr. George Belford have journeyed much in the interior, but have given no account of their

discoveries. An expedition fitted out by the Royal Geographical Society of Australasia, in 1885, led by Captain Everill, ascended and explored one arm of the Fly River. They named the branch of this stream that they had traversed the Strickland River, in

honour of the President of the New South Wales branch of the Society. The Fly River was ascended and explored by the Administrator and party in January, 1890. They reached a point six hundred and ten miles from the mouth, in south latitude five degrees twenty-five minutes, and east longitude one hundred and forty-one degrees fifty-three minutes, close to the German boundary, and at the foot of a mountain range one thousand five hundred or two thousand feet high, which was named Mount Donaldson. Between this Mountain and the more distant Victor Emanuel Range was the bold western end of a steep rugged

range of about five thousand feet high. This was named Mount Blucher. There are three bifurcations of the River, the first at two hundred miles from its mouth into the Fly and the Strickland, the second at four hundred and sixty miles from its mouth into the Fly and the Alice, the third about five hundred and forty miles from its mouth into the Fly and the Palmer. The last two are equal in size, and the one followed by Sir William he named the Palmer, supposing the other to be the main stream. The first real grass was seen nearly four hundred miles from the mouth, and the last cocoa-nut



THE HOUSE OF A NEW GUINEA CHIEF.

four hundred and fourteen miles from the entrance. It was estimated that the River sent down a volume of water at thirty miles from tidal influence sufficient to supply the present population of the globe with one hundred and twenty gallons of water every twenty-four hours. The expedition explored the coast from the Fly River to the Dutch boundary, and examined the Kawa Kuss-a River. The Mai Kuss-a and Wassi Kuss-a were found to be arms of the sea and not rivers. A new river was discovered falling into Heath Bay and named the Morehead. It was ascended for one hundred and twenty miles, and is reported to be better suited for navigation than any river met with in the Possession.

Mr. H. O. Forbes, author of "Wanderings of a Naturalist in the Malay Archipelago," came to New Guinea in 1885, and made large botanical and ethnological collections. He resided at Sogeri, in the Astrolabe Range, and mapped the whole of the country between it and Port Moresby. He penetrated to the base of Mount Owen Stanley, some days' journey farther than any previous traveller. In 1887, Messrs. Burns, Philp and Co., sent on a tour of exploration their steamer *Victory*, under the leadership of Mr. T. Bevan. They ascended what was previously known as the Aird River, and made some important discoveries. In the same year the Victorian branch of the Australasian Society sent Mr. W. R. Cuthbertson to New Guinea, and he ascended Mount Obree, of the Owen Stanley Range, reaching a height of eight thousand feet, a much higher altitude than had been attained by previous explorers, but thick rainy weather prevented his ascertaining with certainty that he had reached the summit.

Mount Owen Stanley, the highest mountain of the Range of that name, was ascended by Sir William MacGregor in June, 1889, and re-named by him Mount Victoria. Sir William left Port Moresby on the 20th of April, and ascended and explored the Vanapa River. Having satisfied himself that it was possible to conduct an expedition of sufficient magnitude up the Vanapa River and find a way into the interior, he sent one of his officers to Port Moresby for stores and native carriers. On the 17th of May, the re-organized party for the ascent of the Mountain started from the camp on the Vanapa River, and on the 11th of June Sir William MacGregor stood on the top of Mount Owen Stanley. Forty-two persons started from camp, but six only really reached the summit. The three Europeans who accompanied the Administrator remained in camp at an altitude of nine thousand feet, and most of the native carriers also remained there. The reduced party consisted of Sir William, Mr. George Belford, a half-caste Samoan, two Polynesians and six Papuans. The height of the highest peak of Mount Victoria was made at thirteen thousand one hundred and twenty-one feet, which is very near the estimated height (thirteen thousand two hundred and five feet), given on the Admiralty charts. Sir William MacGregor and his companions camped two nights on the Mountain's top, and traversed the whole length of the summit from south-east to north-west. No trees were found on the Mountain within one thousand five hundred feet of the summit, and but few bushes within one thousand feet. The sky was blue and cloudless. In the early morning the ground was white with frost, and icicles were seen, an inch in diameter, and seven or eight inches long. In the middle of the day when the sun was shining the thermometer rose to seventy degrees. Several varieties of daisies, buttercups, forget-me-nots, etc., were found, and among the few birds seen was a lark. From the top of the Mountain the north coast could be discerned.

Between the Mountain and the north coast is a large area of comparatively flat country, and there seemed to be more population than on the south side. A large number of mountains and peaks were named by the discoverer, the next highest to Mount Victoria



PORT MORESBY, NEW GUINEA.

being Mount Albert Edward, twelve thousand five hundred feet. Rivers could be seen, but it was impossible to note which way they ran, as the country was low and nearly

flat round the base of the large mountains. The Vanapa River drains the whole of the south side of the Owen Stanley Range.

On the 3rd of April, 1883, Mr. H. M. Chester, Police Magistrate resident at Thursday Island, arrived at Port Moresby in the Government schooner *Pearl* to proclaim the annexation to the British Empire of the half of the Island unclaimed by the Dutch. He had been sent by Sir Thomas McIlwraith, the Premier of Queensland, on behalf of his Government. On the following day a proclamation was read taking possession of "that portion of New Guinea, and the islands and islets adjacent thereto, lying between the one hundred and forty-first and the one hundred and fifty-fifth meridians of east longitude, in the name and behalf of Her Most Gracious Majesty Queen Victoria, her heirs, and successors." The British flag was then hoisted and saluted by the two small guns on the *Pearl*. This annexation not being accepted or recognized by the Imperial Government did not take effect, and so became void. It led, however, to a strong expression of public opinion in Australia on behalf of annexation.

On the 2nd of November, 1884, Commodore Erskine, A.D.C., arrived at Port Moresby in *H.M.S. Nelson*. Most of the squadron of the Australian station was already there, and others followed. On the 6th of November an imposing function was held on shore, when the Commodore proclaimed, in the name and with the authority of Her Majesty the Queen, a Protectorate over "all that portion of the southern shores of New Guinea commencing from the boundary of that portion of the country claimed by the Government of the Netherlands on the one hundred and forty-first meridian of east longitude to East Cape, with all islands adjacent thereto south of East Cape to Kosmann Island inclusive, together with the islands in Goschen Straits, and also the D'Entrecasteaux Group and smaller islands adjacent."

In December the area of the Protectorate was extended by *H.M.S. Raven* and *H.M.S. Dart* visiting the north-east coast as far as Huon Gulf, and hoisting the British flag. Captain Ross of the *Raven*, and Captain Bridge in the *Dart*, proclaiming an extension of the Protectorate from East Cape to Huon Gulf. The Islands of Rook and Long were also included in the protected territory. After all these functions had taken place, and the ceremony of hoisting the flag at so many places had been completed, it was with surprise that the announcement was received in the Press that the German Government laid claim to an area nearly equal in extent to that claimed by Great Britain. By an arrangement made by the British and German Imperial Governments, the territory on the north-east coast, lying between Mitre Rock on the eighth parallel of latitude to the Dutch boundary, was proclaimed a German Possession. The boundary inland is from where the one hundred and forty-seventh degree of east longitude cuts the eighth parallel of south latitude, thence in a straight north-westerly line to the intersection of the sixth parallel of latitude and the one hundred and forty-fourth degree of east longitude, thence to the point where the fifth parallel cuts the Dutch boundary on the one hundred and forty-first meridian of east longitude. By this division British New Guinea has an area of eighty-six thousand three hundred and eighty-two square miles, and German New Guinea one of sixty-eight thousand eight hundred and three square miles, leaving about fifteen thousand square miles for Dutch New Guinea.

Soon after the proclamation of the Protectorate, Sir Peter Scratchley, R.E., K.C.M.G.,

was appointed Special Commissioner, and arrived in New Guinea on the 28th of August, 1885. He died of fever on board the steamer *Governor Blackall* on the 2nd of December, 1885. Early in the following year, the Hon. John Douglas, C.M.G., Government Resident at Thursday Island, was appointed Special Commissioner for the Protected Territory. During this time it had become evident that a Protectorate which assumed no authority over the natives was unsatisfactory, and quite insufficient for purposes of Government. The Australian Governments of New South Wales, Victoria and Queensland having guaranteed the sum of fifteen thousand pounds per annum for the expenses of Government in New Guinea for a period of ten years, the Imperial Government

assumed the sovereignty over British New Guinea. On the 4th of September, 1888, the sovereignty was proclaimed by Sir William Mac Gregor, M. D., K. C. M. G., who had been appointed Administrator of the new Possession. Captain Day H. Bosanquet, R. N., *H.M.S. Opal*, administered the oaths of office, the Royal Standard was hoisted and saluted by the guns of the *Opal*, and British New Guinea became a British possession. The Government of the Possession is vested in the hands of the Administrator, assisted



A NEW GUINEA TREE-HOUSE.

by a Legislative Council, to consist of not less than two, or more than five, Members appointed by the Crown. The Administrator has to correspond with the Governor of Queensland, and to receive instructions from him "for guidance in the discharge of his office." All minutes

of the Executive Council have to be sent to the Governor of Queensland twice a year, for transmission to the Secretary of State for the Colonies.

The seat of Government is at Port Moresby, where there is a small Government House. The Chief Judicial Officer, Government Secretary, Collector of Customs, Post and Port Master have offices at Port Moresby. There is a Resident Magistrate at Samarai, near China Straits, and also at Mabu Dauan, near the Fly River. A Native

Regulation Board controls aboriginal affairs, under the sanction and with the approval of the Administrator and the Legislative Council.

The flora and fauna of New Guinea consist of both Australian and Indo-Malayan types. The flora of the same level on the different parts of New Guinea which have been visited, seems to be nearly the same. Much interest attaches to the exploration of the higher altitudes, on account of the new forms of vegetable life which may be found there. Near the south-east coast the *eucalypti* are the distinguishing feature of the open forest country, while the sides of the hills skirting the coast are covered with coarse grass, gum-trees and *cycas* palms. Mangroves of various kinds are found in great abundance, especially in the creeks and round the protected bays. In the Gulf of Papua the sago-palm is very plentiful, and tons of sago are every year prepared by the natives. The forests are very numerous, and in them all tropical vegetation luxuriates; beautiful creepers interlace and intertwine about the gigantic trees; magnificent crotons and variegated *dracena* adding a pleasing variety to the scene. Graceful palms wave their feathery plumes, and the noble banyan stretches far its grateful shade. Ferns and orchids have here their home, while a carpet of lovely moss refreshes and delights the eye. On the mountain ranges the vegetation is equally rich and beautiful. Edible fruit-trees are not numerous. The wild mango is, however, plentiful. The bread-fruit, chestnut, and rose apple are widely distributed, while many smaller fruits are eagerly sought by the natives. At the east end of New Guinea, and also at Astrolabe Bay, are found species of *Bassia*. That at the east end has been named by Baron von Mueller, *Bassia Erskineana*, in honour of Captain Erskine, who, as Commodore of the Australian Squadron, visited the south-east coast in *H.M.S. Nelson*, and proclaimed at various places the British Protectorate. The native gardens produce *taro*, yams, sugar-cane and bananas. Sweet potatoes, maize, cassava, pumpkins, melons, pine-apples, oranges, lemons and the *papaw*, have been introduced by the missionaries. A good cucumber is indigenous in some parts. Cocoa-nuts are plentiful on the coast, and where the soil is good, the *areca* palm flourishes, and is much sought after for its fruit, the *areca* or betel nut. Wild nutmegs are common in some districts. Turmeric, ginger, and the *piper mythisticum* (the *kava* of the South Seas) are also found. Tobacco is indigenous on the south-east coast, and was smoked by the natives before the advent of white men. The Australian character of the fauna is strongly marked. The wallaby, *cuscus*, bandicoot and *echidna*, with other marsupials are found in all parts of New Guinea that have been visited. No placental mammal is found larger than the wild pig, which is of a peculiar species. It has also been domesticated, but is now in many places on the coast crossed with a foreign pig introduced by white men. A dog resembling the dingo is indigenous, but it is only found in domestication. It does not bark, and to compensate for this, howls hideously. Flying phalangers of various kinds abound in the forests, and flying-foxes are very numerous every-where. Snakes and lizards are in great variety. Two or three species of the former are venomous, and held in great fear by the natives. The *avi-fauna* is particularly rich and interesting, and comprises both Australian and Indo-Malayan types. No country in the world possesses so many beautiful and gorgeously plumaged species. About twenty species of birds of paradise have now been discovered, and an immense variety of kingfishers, parrots and pigeons, including some

of the most beautiful and remarkable of their respective families. Nearly four hundred species of land birds have already been described. The laughing-jackass and the magpie are as numerous as in Australia. Instead of the emu, New Guinea has the cassowary. Cockatoos, parrots and parrakeets are very numerous. Pigeons are well represented, headed by the king of pigeons, the magnificent *goura*, or crowned pigeon, of which several species are known.

Brush-turkeys and the jungle-fowl make their mounds in every forest, and the interesting bower of the fawn-coloured bower-bird is frequently seen. But the characteristic bird of New Guinea is the bird of paradise. Every species of this lovely bird has a beauty peculiarly its own. From the little king bird to the magnificent *epimachus* all are exquisitely coloured, and their skins and plumes are highly prized by Europeans, and even by the natives themselves.

New Guinea has a large population, although for its area, very small when compared with more civilized nations. The people are split up into an immense number of tribes, each of which is isolated and separate from its neighbour. Great diversity of opinion



A NEW GUINEA GIRL CARRYING WATER.

prevails among ethnologists respecting the Papuan race. Scarcely any two descriptions of the supposed typical Papuan agree in their details. People familiar with these races by association, however, have difficulty in accepting any of the current theories as correct. The natives in the west and north-west part of the Island have doubtless a considerable Malayan admixture. The Malay *praus* visit the north-west coast regularly, going with one monsoon and returning with the other. The visitors live with Papuan wives during their stay. The captains of these vessels are sometimes Chinamen, which accounts for the fact of a very distinctive Chinese element being frequently met with. The mountain

tribes in the north-west, such as those in the Arfak Mountains, have much in common with those inhabiting the south-east ranges, and are probably one and the same race. In the south-east peninsula a light-coloured race is found on the coast, resembling strongly the Polynesians of New Zealand, Tahiti and Samoa. A darker coloured people is found on the coast of the Gulf of Papua, and the two races meet in the Maiva District, to the east of Cape Possession. West of it are the dark tribes, east of it the lighter coloured race. The inland tribes inhabiting the mountains differ in many respects from those on the coast. They are smaller in stature, darker in colour, and more hairy. Their hands and feet are remarkably small. They are looked down upon by the coast tribes as an inferior race, but are feared by them for their supposed supernatural power. This points to the probability of their being the true indigenes of the soil, while those on the coast are probably settlers, and have driven the darker race inland. A remnant of an inland tribe, called the Koitapu, is living now on the coast in the same villages as the Motu tribe. They intermarry with the Motuans, but still preserve their separateness. Comparatively little or nothing is known of the characteristics, manners and customs of the natives of any part of New Guinea excepting those of the south-east district. The natives of that portion comprised within the south-east peninsula are not a tall race. On the coast they average about five feet seven inches. Neither are they coarse in figure; they are muscular and agile, but not obese. They are generally upright; a round-shouldered man is rarely seen. There is considerable variety in features and in hair. Three distinct kinds of hair are common: 1. Straight, smooth hair; this is not stiff enough to stand out in the large mass which the New Guineans so favour: 2. Frizzy; this is the commonest; it stands out in a great wavy mass, and is much admired by all the natives: 3. Woolly; this is not so woolly as the negro's hair, but is very thick, and most intractable with an English comb. The same difference may be seen in nose and lips. Some have thick lips, and widely dilated nostrils, while others have almost a European nose and lips. Wallace speaks of a hooked nose as one of the characteristics of the Papuan race. This kind of nose is often seen on the south-east coast. The universal custom of piercing the *septum* of the nose, and wearing a piece of stick or stone through it from childhood, no doubt tends to draw down the tip, and helps to give the nose that peculiar appearance which has so often been the subject of comment. Very few of the men of the coast tribes have any hair on their faces, but among the hill tribes beards are quite common. The eyes are dark and bright. The cheek-bones are often prominent, but the facial angle is not acute.

There is not much in the way of New Guinea costume to describe. Some tribes in the Gulf of Papua wear nothing at all, but eastward all wear something. A narrow belt or string, worn as a "T" bandage, is all that the men about Port Moresby wear. They consider, however, that they are well dressed, and speak with great contempt of the nudity of those to the west who do not wear the string. The narrow belt worn at the dances, and in full dress, is made from the bark of the paper mulberry beaten out, and then painted with turmeric and lamp-black. At Orangerie Bay, and to the east, the men wear an elaborate covering, something like bathing drawers, made of *pandanus* leaves sewn together. The women wear a kind of petticoat of grass, or fine palm-leaf, shredded out and plaited into a string, which is tied round the waist just

above the hips. Some are quite white, while others are very prettily variegated. In mourning the petticoat is worn very long and with the ends untrimmed. Many of the tribes, too, wear netted garments in mourning made of fine string. Collarettes, vests, and even footless stockings are knotted on and remain till they rot away. Certainly the most striking ornament a New Guinean wears is the nose stick. These are generally made of strips of white shell (*Tridacna gigans*), ground down and polished. These are of all lengths and sizes, each tribe having its own fashion of nasal ornamentation. Every child has his or her nose pierced when about six years old, but beyond a short piece of stick many wear nothing through it. An unpierced nose is a reproach, for in spirit-land no unpierced nose can enter the Papuan heaven. Ear-rings, or rather ear ornaments, of every size and shape are worn; some made of tortoise-shell are light and pretty. Thirty or forty of these may be worn in one ear without unduly weighing it down, but some are of enormous size, stretching the lobe of the ear to a dreadful extent. A waist-belt of bark, or plaited fibre, is worn by some tribes, and so tightly drawn as to prevent their stooping. Feather ornaments are highly prized by some. At Kadi, in Redscar Bay, a frame fifteen feet high is dressed with feathers and worn at the back, tied at the waist and neck. Most grotesque antics are made by the wearers as they dance, or rather jump about, with these structures towering above their heads. Birds of paradise (*Paradisea Raggiana*) plumes are worn by almost all the natives in their dances. Tattooing is practised by many of the tribes. At Port Moresby, and among the Motu tribe, the women are profusely tattooed, both bodies and faces. At Maiva the pattern is quite different, and the faces look hideous with straight lines marked all over them. At South Cape the designs on the face are very elaborate. The men are only slightly tattooed, and with them it is rather a mark of honour than a personal adornment. They are not entitled to this distinguishing badge until they have killed some one, or have taken part in the killing of some one. The tattooing is effected by means of lamp-black made from burnt resin, mixed with water, and painted on the skin in the desired pattern. The whole of this is then gone over and punctured with a thorn, driven in with a mallet. It is often done a second time to ensure the pattern showing brightly and distinctly.

It is the stone age still in New Guinea, and all the weapons in use are made of stone or wood. Bows and arrows are used in the Gulf of Papua, and to the west, the arrows being tipped with ebony, bamboo, and sometimes with human or cassowary bone. They are not poisoned in the district east of the Aird River, but are said to be so in the district west of it. Clubs of various kinds and shapes are used. The most formidable is the stone club, which is made in the interior, but used by almost all the tribes on the coast. They are of different shapes, the most common being a plain flat disc, about six inches in diameter, through the centre of which a hole is drilled, and a handle about four feet long inserted. The top is generally ornamented with feathers. Stone clubs of other shapes are also made. Some are of the shape, and about the size, of a cassowary's egg; others again are star-shaped, and some have two or four projections with small ones between. The latter are very accurately made, and are very formidable weapons. Wooden clubs of various shapes are also used. Some at the east end of New Guinea are very heavy and nicely shaped, with a carved handle or hilt

like a sword. But the common weapon, and the one most depended on east of Yule Island, is the spear. One of the first and most popular games of the little boys is throwing a spear at a rolling cocoa-nut husk. They soon acquire remarkable skill in poising and throwing the spear. It is their only weapon in wallaby hunting; each man takes a handful of light little spears, and a piece of boar's tusk or broken bottle with which to scrape and re-point them. For fighting purposes the spears are long and heavy, made of a mountain palm, and the point more or less elaborately carved. Some of the spears obtained at Orangerie Bay and District are very fine specimens of primitive art. Daggers made of cassowary bone are also used, but these imply closer warfare than a native likes. At Hood Point and Bay a peculiar weapon is used which may best be described as a man-catcher. It consists of a loop of cane, lashed in a handle made up of three or four pieces of cane six or seven feet long, which also hold a small spear in the neck of the loop. The loop is thrown over the head of an escaping enemy, and then the spear point is jerked into his neck from behind. Shields of different shapes and patterns are used by all the natives. All the weapons are carefully ornamented, and greater taste and skill is manifested by the New Guineans in the preparation of their weapons than in anything else.

In studying the houses of New Guinea it must be remembered that the people are still in the stone age, and that all their houses are built with the tools it affords. No tool of metal is used, and no iron nail is to be found in any house, from foundation to ridge-pole. In the western part of the Island the houses are very long, capable of accommodating a number of families. A house near the Fly River was found to measure five hundred and twenty feet long by thirty feet wide. Mr. Chalmers visited one in the Elema District which was one hundred and sixty feet long. It had a large peaked portico thirty feet wide, supported by posts eighty feet high. From this high front it tapered and narrowed away to the end, one hundred and sixty feet distant. The same kind of house, many hundred feet long, is found in Borneo and also in Assam. These great houses disappear to the east of Cape Possession, or exist only in a modified form, as sacred houses in which the men seclude themselves for a certain time every year. The Malay practice of building on piles is common all over New Guinea, even on the hills. This is the characteristic of the New Guinea house, the piles varying from six to twenty feet in height. There is a necessity for this in the coast villages, as they stand mostly in the water; many of them, as Kaile, Kapakapa and Tupuselaia, in the Port Moresby District, and Hula at Hood Point, are always surrounded by deep water. Others, as at Port Moresby, are just below low-water mark, the fronts of the houses jutting on the street and always dry. The only reason the people can give for this is that their fathers did so; but the probable reason for their fathers doing so is that they were settlers, and being afraid of the inland tribes, built their houses so that they might escape in their canoes if attacked. In all the Koiari and mountain villages are tree-houses, from thirty to sixty feet high, sometimes two or three in one tree. They are not built among the thick branches, but all is cleared away beneath them and a suitable fork or arrangement of limbs being chosen, a platform of saplings is lashed across and the house built on it. These houses are reached by ladders made of vines and creepers, and in times of alarm are drawn up by the occupants after them. All

the houses are built of wood, and thatched either with grass or palm-leaves. The shape of the roof varies in the different districts, but all have a high pitch. None of the houses possess anything that can be called furniture, a log or two of wood, to serve as pillows, and a few mats being all. Every house has a made fire-place in the centre, and generally a fire burning by day and night.

The canoes are of great variety. They are made out of a log, which is hollowed by fire and rude stone adzes. The small canoes are used for fishing inside the reef, the



A NEW GUINEA DEAD-HOUSE.

large ones being for trade purposes, and used singly as well as double. All are propelled by mat sails. New Guineans will never paddle if they can help it, preferring to wait a long time for wind to save them the trouble. At the east end of New Guinea they build large canoes very much like whale-boats, and can sail with them as close to the wind as we can with our vessels. They are profusely ornamented, and the decorations and carvings are really graceful and artistic. Tons of sago are brought every year from the Gulf to Port Moresby in huge square-shaped vessels. These are made of eight, ten, and even twelve and fourteen great canoes firmly lashed together; they are then decked over with saplings, bulwarks made all round, and a house built at each end; a crab-claw-shaped sail is hoisted, and with a fair wind these unwieldy craft make good progress and safe voyages.

The coast tribes cook their food by boiling in earthenware pots. This is the ordinary mode of cooking. Fish, meat, vegetables and fruit are all boiled. The inland tribes cook with hot stones as the South Sea Islanders do, but they also boil in pots. All natives broil or roast when they are travelling, or do not wish to prepare a regular

meal. The youngest children will cook on the hot ashes any little snack they may get. There is another mode of cooking meat, such as joints of wallaby, by drying over a small fire. This mode is resorted to when they wish to keep the meat longer than usual, as in preparing for a feast, etc. The coast natives are generally nice and cleanly in cooking and eating their food, a characteristic which is not so marked inland.

The diseases of the people are not numerous, but the climate is to strangers very unhealthy. The natives themselves suffer from fever, though it is not severe. The disease that follows every-where in the white man's wake is unknown in New Guinea. Their most serious and troublesome diseases are ulcers of various kinds. Many children die from these. A form of leprosy is met with. A very unpleasant skin disease, which covers the whole body with a kind of ring-worm, is travelling along the coast from the east. It is exceedingly loathsome to white men, but the natives do not seem to regard it seriously. Small-pox was epidemic about 1864, and carried off thousands. It came from the west and travelled eastward, but has never appeared since that time. Colds, coughs and ophthalmia are often epidemic. The natives have no medical treatment for any disease. As it is supposed to be a bewitchment of some kind, they have resort to medicine men and women, who levy enormous fees. They perform incantations over the disease, suck the affected part, and pretend to draw stones, string and rubbish from the place. In the case of an epidemic, the whole village turns out at night to drive it away. They beat tom-toms, throw fire-sticks, shout and yell, and go from one end of the village to the other, driving the evil spirit before them.

Among the coast tribes of the south-east peninsula, a wife is looked upon as a valuable possession, and is therefore paid for. Much more is paid for a wife than for anything else, and a woman is proud, not of the dowry she has brought her husband, but of the price he has paid for her. There are no marriage rites anywhere beyond the exchange of presents of food and the payment for the wife. Polygamy is common in some parts, but rare in others. At Port Moresby very few men have more than one wife. Dancing is every-where popular, and the children have many games and amusements. The only musical instruments are drums and tom-toms, pandean pipes, jew's-harps and conch-shell trumpets. The methods of burial vary among the different tribes. At Port Moresby the dead are buried, but in the case of a chief, or much loved man or woman, the body is not covered in with earth; instead a light covering of mats or boards is laid on it, and an enclosure made around the grave, inside of which the principal mourners sleep. In the Koiari District, and among the hill tribes generally, the honoured dead are not buried, but laid out in state in the house, while the relatives live in the same house. After decomposition has far advanced, the body is put on a platform of sticks in the sun, a fire is lighted, and the body soon dries up. After the bones fall apart, they are collected, tied up in a bundle, and hung up in the house where the dead man or woman formerly lived. In the Saroa and Rigo District burial is not practised. To bury the body of a deceased relative in the earth is very repugnant to them.

Superstition reigns over New Guinea, and the people are in bondage to medicine men and sorcerers who live on the credulity and ignorance of the people. Here and there, as at Hood Bay, there is sometimes a ceremony which seems to recognize a Supreme Being who has power to make the earth fruitful, and holds life and death in

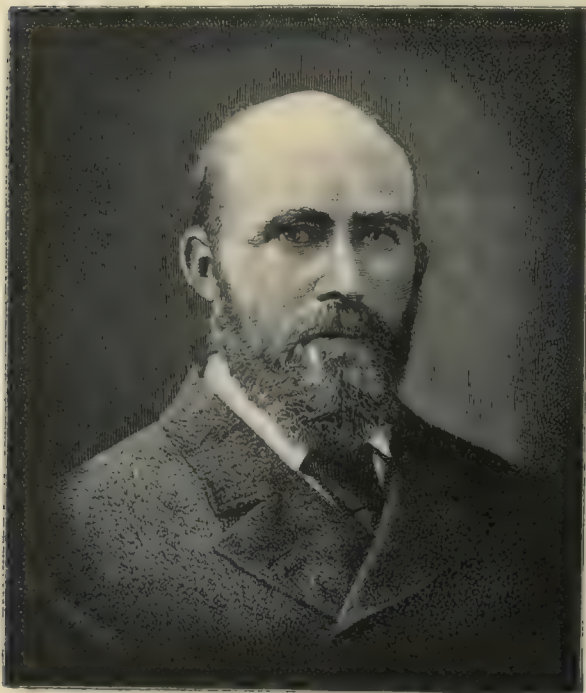
his hands, but its original meaning is almost lost. The signification of the rites is forgotten and gone, but every-where there is a strong belief in the deathlessness of the soul. The spirits of the departed go away into Hades, which is sometimes ocean space, and sometimes the mountain tops. A recent death is said to bring the spirits about in crowds. They are much feared for their supposed power for mischief and causing misfortune. The native idea of right and wrong is very vague and confused. The greatest sin to the native mind is the violation of the *taboo*, a something made sacred.

The languages and dialects are almost innumerable. Every few miles of coast brings one to a people speaking a different dialect to those left a few hours before. The present knowledge of the languages spoken is so imperfect that it is impossible to draw any inference from them. A grammar and dictionary of the language spoken by the Motu tribe in the Port Moresby District have been prepared and printed. The grammar of the language is, no doubt, largely Melanesian, while the vocabulary is largely Polynesian. Every syllable is an open syllable, no two consonants ever standing together. The language is much more agglutinative than any of the Polynesian dialects. Sir William MacGregor has printed vocabularies in ten different dialects. The words were collected by him in his official tours in different parts of the Possession.

The manufactures are only such as the wants of an uncivilized people necessitate. They consist principally of the manufacture of ornaments, such as armlets, nose-sticks and necklaces; and weapons, such as spears and clubs. Over these they spend much time, and display a good deal of ingenuity. The tools are rude and simple, consisting only of such as the stone age produces. They are pieces of obsidian; a large flat grinding-stone; a drill, with a flint point worked with a circular piece of wood fitted on the stem, and kept in motion by an endless string, and stone hatchets of various kinds. The women of the Motu tribe, of Orangerie Bay, and some other districts, make large quantities of pottery, which is carried far and wide for barter. Water chatties, cooking-pots, bowls and dishes are made of very good shapes. The women use no wheel or mechanical appliance in shaping them. They hold a smooth stone on the inside of the pot, and work on the outside with a large wooden spatula. They use salt water for mixing the clay. After the vessels have been shaped and are finished, they are dried in the sun, and afterwards baked in a wood fire. They are rather fragile, but with the careful handling they receive from the natives last a very long while. Forrest's description of pottery-making, as seen by him at Dorey in 1775, is correct of the south-east coast in 1890. The women also make a netted bag similar to one used by some of the aborigines of Australia. They are beautifully made, and are of many different sizes. Some are very artistically coloured in a variety of patterns, and the large ones are used by the women to carry all their burdens. They put the band of the bag across the head, between the forehead and the crown, so that the bag hangs down the back and throws all the weight on the neck. The bags also serve as hammocks and cradles for the babies. The womens' dresses are the special manufacture of some villages. The belles and matrons of New Guinea are as pleased with a new petticoat, and as critical of its qualities, as their fair sisters of civilization are of their more elaborate costumes. The men make spears, some of which are elaborately carved; clubs of different kinds, the stone ones being made only by the inland tribes; and bows and

arrows, although these are not used east of Port Moresby. Nets of various kinds are made by the men, who use a mesh and needle like those of Europeans, but do not hold the needle in the same way. They are made all sizes, from a small hair net to the heavy dugong or kangaroo net. At the east end of New Guinea the natives show great taste in carving. Everything upon which a design can be cut is ornamented by a graceful and pretty device. The figure-heads of their canoes, the tops of their paddles, the floats of their nets, the gourds for holding lime, the spatulas used for the lime, and most other suitable articles are all beautifully carved.

The products of New Guinea available for a foreign market are very few. It is only in the west of the Island that an export trade is maintained with the civilized



DR. SIR WILLIAM MACGREGOR.

world. A considerable commerce has been carried on by the Dutch for some years past, principally with the islands off the main-land, and is worth about twenty thousand pounds per annum. The exports are sago, nutmegs, *massoi* bark, bird-skins, trepang, tortoise and pearl shell. But on the south-east peninsula the products of the land are few and small. A considerable quantity of trepang is gathered by European and Chinese fishermen on the outlying reefs. Pearl-shell is obtained off the east end of the Island. Large quantities of cocoa-nuts are found at Maiva, Hood Bay, and the east end of New Guinea. Copra might be prepared, but the cocoa-nuts are too valuable to the natives to admit of large quantities being exported. Cedar, and a similar wood called at Hood Bay *malava*,

abounds in some districts. Ebony and sandal-wood are both indigenous, but do not seem to be plentiful on the coast. The sago-palm flourishes in New Guinea at many places. The natives prepare large quantities for barter with other districts, but it has not been found worth exporting to a foreign market. Tobacco is grown for home use, and for trade with other places, but is now being superseded by the foreign tobacco. In the Gulf of Papua, and as far east as Port Moresby, the natives smoked before the arrival of white men. New Guinea is probably rich in minerals, but none have been utilized, and only a few really discovered. Various traditions of gold have been current for many years. In 1877, the first specimens of gold-bearing quartz were found, but not in sufficient quantities to pay. Since that time several parties have prospected in various directions, but without much success. In September, 1888, gold was discovered at Sud Est Island in the Louisiade Archipelago, and subsequently at Rossel Island and St. Aignan's. The finds were alluvial, and a number of miners came from North Queensland to work them, the largest number at any one time was probably seven hundred, but the gold was soon exhausted, and at date (1891) only eighty men remain. The total amount of gold reported at the Customs from these New Guinea gold-fields from discovery to June, 1890, was seven thousand three hundred

and twenty ounces, valued at twenty-six thousand eight hundred and twenty-seven pounds, but this is a good deal less than the amount actually obtained. The existence of other minerals has not been proved. Until a competent geologist visits the country and reports on its formation, with a view to practical mining operations, the mineral products of New Guinea will be conjectural only.

The earliest missionary work among the natives of New Guinea was probably that of the Lutheran Church, which had missionaries at Dorey some years before Mr. Wallace visited it in 1861. A Roman Catholic mission was begun on Woodlark Island, in the Louisiade Group, but the members died, the Bishop removed to Rook Island, where he succumbed to fever, leaving but little result. Sir Wm. MacGregor in 1890 found some natives who remembered them, and who crossed themselves and knew a few French phrases. In 1872, the London Missionary Society began work on some of the Islands in the Fly River District, and also on the main-land at Redscar Bay, a large number of South Sea Island missionaries, under the superintendence of a few Europeans, have been engaged in teaching and preaching. Sixty stations are now (in 1891) occupied on the south-east coast from the Fly River to East Cape, and a considerable number of natives have embraced Christianity and made some progress in education and civilization. A Roman Catholic mission was begun in 1885 at Yule Island, by brethren of the Sacred Heart of Jesus. They have extended their mission to the Saint Joseph River District, in which they have several stations. The Wesleyan Board of Missions are taking up the islands lying off the east end of New Guinea, in connection with a station on the main-land at Bentley Bay. The Australian Anglican Mission is beginning operations on the north-east coast from Cape Ducie, to the German boundary at Mitre Rock. In German New Guinea several Protestant missionaries from Germany are settled among the natives.

THE NEW BRITAIN GROUP.

THE New Britain Group is generally considered to include the two large islands of New Britain and New Ireland, the small group called the Duke of York Group, New Hanover, Sandwich, Gerrit, Denys, St. John's, Sir Charles Hardy's and Fischer Islands, and the Kaan Group, with a number of outlying islets. Of the whole Group but little was known before the year 1875. Up to that time no white man had been able to live on the main Island, nor was there any trustworthy information obtainable either about the place or the people. Some traders from the firm of Messrs. Godeffroy and Sons had resided for a few weeks on the island of Matupit, in Blanche Bay, but they came into collision with the natives, and were compelled to fly and abandon the Island, after shooting some of the natives in making their escape. New Britain is separated from the north-east coast of New Guinea by Rook Island, and a deep-sea channel about fifty miles wide. Dampier's Straits is the name given to the channel through which that navigator sailed, in the year 1700, and thus proved that New Britain was a separate island, and not a part of New Guinea. Dampier calls the Group by the one name of New Britain, and thought indeed that it was only one main island; but Carteret, in 1767, discovered St. George's Bay to be a wide open strait, varying from twenty to thirty

miles in width, which he named St. George's Channel. Dampier describes the island as "generally high mountainous land mixed with large valleys, which, as well as the mountains, appeared very fertile, and in most places that we saw the trees are very large, tall and thick." This short description may be taken as a fairly accurate one. The west coast generally consists of a mountain range rising in most places abruptly from the beach, with very few shores or fringing reefs. These ranges have jagged and broken peaks, and are intersected by deep gullies or ravines, which seem to terminate in many instances far inland, at the centre of the range, at the base of steep peaks on which the marks of land-slips are plainly visible. The mountains are all well wooded, and the whole of the coast-line is well watered by numerous small streams and rivers, the beds of most of them showing that in the rainy season large bodies of water find their way down them to the sea. On the eastern side the ranges do not rise so abruptly from the coast; the soil is often of a stiff, clayey nature, and comparatively large tracts of open thickly-grassed country may be seen. There are no volcanoes on New Ireland, but they abound on New Britain and its outlying islands. The ejected matter consists almost entirely of pumice, no lava stream having been so far observed.

Though by some people the honour of the discovery of New Britain has been given to the Spaniards, there is no account obtainable of any such discovery. After Magelhaens in 1519, the principal attempts to explore the then unknown Pacific appear to have been made by Cortes. His first little fleet of four vessels was burnt in the dock-yard before completion. In 1529, he received the appointment of Captain-General of New Spain and of the coasts of the South Seas, but his enterprises seem to have been wholly confined to the shores of the Pacific, and especially in the Gulf of California.

In 1564, Lope Garcia de Castro, who was the Viceroy in Peru, sent out two ships to find out the land from which Solomon caused gold and ivory to be brought to Jerusalem. His nephew, Alvaro Mendaña de Neyra, then twenty-six years old, was in command. Hernando Gallego was pilot; Pedro de Ortego was in command of the troops, and Pedro Fernandez de Quiros was one of the officers. The expedition sailed from Callao in 1567, and eighty days afterwards discovered the Solomon Group. On Mendaña's second voyage, in 1595, he discovered Santa Cruz and died there. De Quiros and Torres also visited the Solomons and the New Hebrides, and sighted Australia and New Guinea; but the earliest distinct notice of the discovery of any of the New Britain Islands is to be found in the account of Le Maire and Schouten's Voyages in Dalrymple's "Collection."

The temperature ranges from ninety degrees to seventy degrees, very rarely falling so low as seventy-four; the average temperature all the year round is about eighty degrees. The atmosphere is very humid, and the dew-fall very great. The effects of this damp enervating heat are soon apparent; and most of the foreign residents suffer, sooner or later, from attacks of intermittent fever. It has, however, been found that in the case of those who have a strong vigorous constitution which enables them to withstand the prostrating effects of the first few years, the attacks of fever become much less frequent, and some indeed enjoy almost perfect immunity from them. The natives assert that the monsoons were formerly much more violent than they are now; both the natives and the white men in Eastern Polynesia assert the same of the trade-winds there. From

December to May the weather is often very squally, and the north-west monsoon prevails. During these months the rain-fall is exceptionally heavy, a fall of four inches in as many hours has been very frequently recorded, and the annual total would probably not be below one hundred and twenty inches. The south-east monsoon blows very strongly from June to October, when a few weeks of variable weather precede the setting in of the north-west monsoon. The tides are very irregular, and seem to be much affected by the prevailing wind and currents. A change of wind is on some days sufficient to counteract almost entirely the usual ebb of the tide. There is only one tide in the twenty-four hours. The flood-tide in the channel between New Ireland and the Duke of York Island sets to the north along the coast of the latter, and the ebb to the south. During the whole of the north-west monsoon, or from the end of November to the end of April, the current sets strongly to the south-east. During some of these months, especially January and February, it is often very strong indeed, and the channel between the Duke of York Group and New Ireland is covered with trees, which, from the number and size of the barnacles adhering to them, and the quantities of *crustacea* and fishes in and about them, must have been a long time in the water. The current changes during the south-east monsoon, setting north-west in that season.

The life and manners of the aborigines may be best described by individualizing a type, who shall, for our present purpose, be known as *To Ling*, or its feminine equivalent, *Ne Ling*—words in the New Britain dialect signifying “such-a-one.” For the land of *To Ling*’s birth, then, there is no native name. Both on New Britain and New Ireland the land is divided into districts, which often receive their names from a river or mountain. New Ireland is called Tombara on the charts, and navigators no doubt understood the natives to give that as the name of the land to which they pointed when asking the question, but the word simply means the south-east trade-wind, or the quarter from which it blows. There is no unity among the people, and there could scarcely be a general name for a land split up into districts, the people of which have no connection with each other, and speak what are practically different languages. *To Ling*’s home was in a village, the like of which may be found any day in every district of the Group. In a clear patch of ground in the heart of a dense scrub—approached by narrow tracks from all sides, some of which lead down to the beach, and others to huts of



THE “DUK DUK,” NEW BRITAIN GROUP.

neighbouring families—may be seen a collection of rude dwellings built of bamboos or flexible rods. All of these are low, but not of uniform shape. Some have reeded sides, the ends of which rise into two small turrets; in others the roof descends to the ground, and has only one gable open which acts as door-way and chimney in one. Some of these houses are large, especially on New Ireland and New Britain, where there are large separate club-houses for the unmarried boys; but on Duke of York Island, where *To Ling* was born, the houses are small, and in many cases afford room only for the husband to lie down on one side of a small fire, and the wife on the other, with the child or children stowed away in odd corners, and often in most uncomfortable positions. The other houses are a boat-house, which is often the best house in the village, the *Duk Duk* house, into which no woman, nor uninitiated man or boy, dare go, and a *Malira*, or spell-house. Outside the houses are planted the croton, *coleus* and *dracæna* plants, which testify to the instinctive appreciation of the beautiful. If the houses are small, the furniture is, of course, in proportion. Going through the narrow door-way a visitor would probably strike his head against an alarm rattle, made by suspending loosely a dog's tooth, or something of the kind, in a hollow shell or gourd. This is often put up at night that the sleeping inmates may be aroused should anyone seek to enter the hut. Inside the hut would be seen portions of some old canoe split up and laid on the floor at the sides of the house to make a sleeping bunk, mattress and blanket all in one for the inmates. In the other gable-end of the house there would be a few yams, *taro* or bananas, some baskets of the *Tamap* nut, a few cocoa-nuts, some *diwara* or native money, spears and tomahawks; of course, some lime and betel-nuts for chewing, and a fishing net or nets. From the roof would be suspended a wooden hook with string attached, and passing through a wooden disc, or something of the kind, to prevent the rats from going down the string to attack the food-basket suspended on the hook. *To Ling's* parents are undoubtedly Papuans, though they know nothing of the name. It is extremely likely that there was originally one great race occupying these different groups, as far west at least as Borneo, and probably upon the main-land on the side of Siam and on the Malacca Peninsula, and perhaps as far as Burmah. The traces of these people are found in all the different groups, from the black races found in New Zealand by the original Maori settlers, and derisively called by them "black *kumara*" (sweet potato), to Western Malaysia, and also on the main-land. In Malaysia this pre-Malayan race was modified by admixture with the Turanian races of the main-land of Asia, and thus constituted the present Eastern Polynesian race, which still retains so much of its old Papuan element. After this it is likely that the emigration eastward set in, probably caused, as Fornander states, by the encroachments of Malay and Hindu immigration. *To Ling*, is an undoubted Papuan of the black or sooty-brown colour, with frizzly hair, growing generally in thick short matted curls and daubed with coloured clay or with lime. He, with most of his people, has a fair amount of beard, and is of a lanky form, and not so tall or so well formed as the Eastern Polynesians. The language which he speaks is full and expressive, and, unlike that of his fellows in the Eastern group, is full of closed syllables. The dialects are nearly as numerous as the tribes themselves, almost every district, even on the same island, having one of its own, which is often unintelligible to the people living only a very few miles away.

In New Britain, as among all pure Papuan races* in the same stage of development, descent is always reckoned through the mother. These class-relations are very strictly observed. Every man and woman from date of birth belongs to one of two classes, called respectively *Pikalaba* and *Maramara*, and as descent is reckoned through the mother, it necessarily follows that the children of every *Pikalaba* woman are also all *Pikalaba*, both male and female. All lands, fruit-bearing trees, fishing-stones, etc., are included in one or other of these divisions. No *Pikalaba* or *Maramara* man can marry a woman of the same class as himself: this would be regarded as incest, though there was no actual relationship between them. It follows as one effect of this, that there can be no hereditary chieftainship. The man who has the most muscle, the most money, and consequently can buy the most powerful bewitching spells, comes to the front by the operation of the law of natural selection. *To Ling's* mother we will suppose to be a *Maramara*, his father must therefore be a *Pikalaba*; but *To Ling*, taking his mother's class, is *Maramara*. Now when his father the chief dies, *To Ling* may take his place if he is a strong powerful man, or is feared and respected by the people for his money-power; but it does not necessarily follow, for he inherits nothing from his father. All the land, and most of the money being *Pikalaba*, belongs to his father's class and not his own. The origin of this custom is no doubt to be found as dating from the time of a much more primitive stage of civilization than that to which they have now attained, low as this may appear to be. No particular ceremonies are observed at birth. *To Ling* is not troubled with many clothes. He gets a warm banana leaf for the first day, and pure sunshine and dirt afterwards. He is fed first with the expressed juice of the kernel of the cocoa-nut, or with some sweet potato, and afterwards his mother looks after him. The father has the sole right of giving him his first name, which, however, he will change later on for another as he passes out of boyhood.

As life goes on, and *To Ling* is passing from youth to manhood, the custom of these Islands requires that he be initiated into some of the secret societies of his people, and so be prepared to take his full position in the tribe. One of the most important of these strange organizations is the *Duk Duk*. Supposing he were near the chief's enclosure, he would hear suddenly, and at uncertain times, the peculiar cry of the *Duk Duk* from or near the sacred ground, and at once the chief or some of his men would answer it by the same cry, and by giving some peculiar taps on the wooden drum. The cry is repeated again, and again, as the figure comes nearer and nearer, and the beating of the drum in answer is as often repeated. At length a strange figure dances in, which *To Ling*, and all other uninitiated lads, men and women, are supposed to believe to be a spirit from the bush, and of which they must be afraid. This figure has a high conical mask, or head-dress, made of wicker-work, highly painted and decorated with streamers and feathers. Its shape is like a large candle-extinguisher, and it comes down far enough to cover the shoulders. Below this are suspended large thick leaf girdles in separate rings, which rustle much as the figure dances; and all the accompaniments are calculated to impress a native with some degree of fear and awe. The *Duk Duk* often carries a human skull in one of its hands, and it has the privilege of beating or stoning anyone who may come near it, or whom it may be able to lay hold of. The ceremonies of initiation are tedious and painful as well as expensive. Prayers

are offered to the old dead Past Masters, then permission is asked and payments made to them. The boys are taken out into the bush to look for *Duk Duk*, and are befooled in every possible way; the whole ending by their being shown little by little that the so-called spirit is only a man like themselves. They are now *tena mana*, or Masters in the order; and then all set to work to prepare a new lot of *Duk Duk* to befool others with, and to get money for themselves. There are many other ceremonies which *To Ling* may pass through. He may for instance become an *Iniat*, the members of which are taken into the bush when young, and are there fed with pork, shark, turtle, etc., and then, after their initiation, are never again allowed to eat any of those articles. Then there are also some interesting ceremonies observed when the lads obtain new names, about the time of their reaching the age of puberty; and others also which are performed for the purpose of their being taken possession of by the wood spirits, who, they think, will then reveal to them new dances and new bewitching spells. In this latter ceremony they drink decoctions of leaves which appear to intoxicate or poison them until they become violently excited, and in many instances partly deranged.

To Ling has often to incur more trouble and expense in gratifying his wish for a wife than is the case with most people in more civilized countries. He does not usually propose to *Ne Ling* directly, but prefers to get some of his companions to ascertain if he is likely to have a fair chance of success. We suppose that *To Ling* has got his sister to help him, and finding that *Ne Ling* is willing, they become engaged, and are then *webat*. And now commences a long series of negotiations about payment. He gets a basket and puts into it anything and everything he can muster to take as a present to his dear *Ne Ling*. There would be in this basket a few fathoms of *diwara* (the native name for shell-money), some beads, a bit of tobacco, a pipe, shell armlets, pearl-shell, *cuscus* teeth, a bit of red cloth, and anything else he may be able to procure, and happy is the lad when he can slyly get this *ka-na-ograt* into the hands of his loved one. The practical character of the people shows itself in the understood rule that the girl must not use any of these gifts until after the marriage; and much as *Ne Ling* might like a smoke, she must leave *To Ling's* tobacco and pipe untouched for the present. Gifts are given and repaid by the families; money is borrowed and repaid with interest to the chief at ten per cent. from each party, thus giving the wily old fellow, who is often the match-maker also, about twenty per cent. on his outlay. These customs vary somewhat on the main-land of New Britain. For instance, when a lad proposes and is accepted, he clears out into the bush for weeks, as if thoroughly ashamed of himself, and is not seen again in the village until the negotiations are completed, and even when these are disposed of, the young couple cry in public and pretend to be very sorry for their folly. It ought also to be mentioned that as soon as *Ne Ling* and he are married, *To Ling* and his mother-in-law become *nimuan* to each other, and dare never again call each other by name, or have any avoidable intercourse together. Polygamy is common, but no authentic instances are known of cases of polyandry.

To Ling makes a good husband and father from his own point of view. He helps in the plantation work, though he generally lets the woman carry the burdens home, he himself marching by her side, or just behind her with a spear and a tomahawk. When

his wife wants a fire he has usually to make it for her, and this he easily does by rubbing a small piece of stick very rapidly along a shallow groove in a much larger piece of wood. The woman cooks generally in the ordinary native oven, as they make no pottery in New Britain, but when she is away, or unwell, *To Ling* will get dinner for himself rather than go without any. He generally picks up a little of anything he can get for breakfast, and is always ready for anything which may come in his way during the day, but the principal meal is about 4 p.m., and consists ordinarily of yams, *taro* or bananas, perhaps cooked with an oily nut or cocoa-nut juice, and occasionally fish or grubs. They all chew the betel-nut, and say that it is most effectual in warding off the feeling of hunger. When not in the plantation, *To Ling* would generally be found either in the

Duk Duk enclosure gossiping, fishing, mending a net, making a fish-trap, engaged in a dance, or idling aimlessly about the beach. There is much quiet love existing between *To Ling* and his wife, though it would be very improper for him to show any of this in public. Going away on a long journey he will kiss his relative, but not his wife, and so also on returning. He would never dream of kissing her, or of manifesting any particular



A NEW BRITAIN CANNIBAL FAMILY.

interest in her, but they love each other, and if she has no locket to wear with a lock of *To Ling's* hair, she will often wear one of the teeth which may have come out, and she will treasure it when he has gone as lovingly as we do the mementoes of our loved ones.

If *To Ling* gets sick every doctor of note will be called in and be paid for by his wife and her friends. The doctor, whose principal function is not to cure disease, but to annul the powers of the charms and witchcraft which have certainly caused it, will pray over the sick man, rub him with lime, and finish up by blowing lime upon him, and away from him. Or he may perhaps say the prayers over a banana which *To Ling* must eat, and so get the full benefit of the prayers; or he may say them over a cup of cocoa-nut water which he must drink for the same purpose. If, however, they wish to give a hot bath, they do this most effectually. A hole is dug and hot

stones put in, which are laid upon and also covered over with green leaves. The patient is then seated upon this, and closely packed with a kind of cloth made from the bark of the bread-fruit tree. A cup of cold water is then poured down upon the hot stones, and *To Ling* is held down by force in the full volume of the escaping steam.

To Ling's dress cannot be described, simply because he has none, but he often wears a small branch of some croton, or a few *dracæna* leaves, when dressed for a dance. The women on Meoko, strange to say, wear a fringe of dried banana leaf, and the New Ireland women also wear two short tufts of flax fibre, but on the Duke of York Island the women as well as the men are absolutely nude. The weapons are easily described. First, and most generally used, is the spear. These are made of the wood of the *areca* or other palm, and are generally carried in bundles of five; they are rarely barbed, but are sometimes pointed with the bone of a cassowary. On New Ireland the throwing end is balanced with a human leg-bone, generally that of some enemy who has been killed and eaten by the owner. On New Britain the same practice obtains, and a cassowary bone is also used for the same purpose. A large bunch of beautifully arranged parrot feathers is also used as an adornment for the spear. Clubs of various shapes are used, some of which have round stone heads. From the days of his boyhood *To Ling* would be accustomed to the use of the sling, and he would rarely travel far from home without a number of selected pebbles in his little basket. The bow and arrow is not known among them as a weapon, though the boys use it as a toy; and shields are also so used.

To Ling would never be called upon as in the Eastern Polynesian groups to furnish his share of great feasts, without any hope or expectation of payment. His people have very few great feasts, and when a chief does kill a pig and invite his friends, they all have to pay far more than the value of that which they receive. Cannibalism can scarcely be considered as a social custom, but it certainly is undoubtedly very common amongst them. There is a good deal of fear felt by many about it, and *To Ling* would eat his first piece of human flesh very secretly and very quickly. They will not eat food which has been brought in the same canoe with a dead body. When one was being cut up for cooking they would keep their mouths shut, and would also close the doors of their huts for fear the spirit of the dead man would enter into them or their houses.

The money differs somewhat in the different islands, but the proportionate value is well known. The principal money is called *diwara*, and consists of small shells of the *cassis* species strung on split vines. Taking a fathom of this as a standard of value, it would be equal to a piece measured between the breasts, say nine inches of the smaller money used on New Ireland. Every article, whether imported or otherwise, is valued by its equivalent in *diwara*, and words exist, not only for buying and selling, but for lending, borrowing, pawning and redeeming the pledge, as also terms for interest, and selling at a sacrifice. A chief will often lend his shell-money at ten per cent. interest.

The people are not much troubled with foreign complications. They are in constant feud with their neighbours in the next district. They have no common interest, and no national life. Every little district is occupied with its own affairs, and the people will readily join others who may have a grudge against their neighbours if they think there

is anything to be made out of the quarrel. When a war is decided upon, notice is often sent to the other town to meet them on the boundary. A few spears are interchanged, and if anyone is hurt on either side it is generally sufficient for that day. After hostilities are fairly begun, they simply wait for some opportunity to waylay and attack each other. Peace-making is a much more interesting matter. The first proposals are generally made by a neutral party. If both parties consent, they exchange plants of a certain kind of *dracæna*, which are then planted on their respective lands. They meet in force, challenge each other, and some of the leaders, after pretending to fight, stop opposite to each other, and by a sudden twist break off the points of their spears, which are held under the heel for that purpose. Hostages are interchanged, and preparations made on both sides for a feast. The number of those killed on either side are counted, and payment exchanged for each in *diwara*. The food brought by both parties is mixed in one heap, and all eat together. They have no fear of treachery whilst this peace-making is being carried on.

And now we may suppose that *To Ling* has well nigh lived his life. His religious ideas have been faint and indistinct, and yet he has the intuitive perception of good and bad, of right and wrong, as he has also the consciousness of inferiority to some higher power, the instinct of worship, and the feeling after God if haply he may find Him. His idea of wrong-doing is to be mean, to thief, to commit adultery or incest, to fight without just cause, to murder, to accuse falsely, and to quarrel. If *To Ling*, when feeling that death is near, desires to see again the old familiar places where he has lived his life, his friends take him to look for the last time at the beach on which he played when a lad, along the once accustomed paths, to his plantation, back again to the *tareyu*, or sacred ground, where he was first initiated into the *Duk Duk* mysteries, then to the boundary ground where he had so often fought, and then home again to die. His death is announced to all the village by the piteous wailings of relatives and friends. After death he is washed and oiled and painted, as though he were to take part in some great feast or ceremony. All his relatives and friends who wish to honour him bring their coils of money, beads, and other valuables, and place them before him, or by his side. They do this, no doubt, that he may take it all with him to the spirit-land, and so be a wealthy man there. It is, of course, only the spirit of the property which he can take with him, and so long as they retain the substance they are quite satisfied that he should take the remainder. As each man takes back his property again, he breaks off a little from each article, and burns it in the fire which is always kept burning near the corpse, and the friends have to pay for the compliment. As to where *To Ling* has gone, and especially as to whether he stays there all the time or not, his friends are not clear in their views. For some time after death the spirit is supposed to be somewhere about the place where he lived, though he must also have been to *matana nion* (spirit-land) for a visit at all events. Their ideas about this land, however, are very confused, as they will also tell us that the spirits live in the caves and rocks, that the good ones have plenty of good things to eat, and are happy, that the bad ones have to eat filth, and are miserable. They had a vague idea of a Superior Being, *nará-itara-dat*, which is *Nara*, who made us all, or He who made us all. They have also traditions of the Creation, which was the

work of a woman, who was afterwards aided by her two sons; but their religion is principally spirit-worship and fear.

The Wesleyan Missionary Society began mission work in the year 1875. Since that time the Mission has been carried on by fresh supplies of Fijian, Tongan and Samoan native agents, under the constant supervision of European missionaries. The missionaries and teachers have all suffered much from the unhealthiness of the climate, and several of them have died; but the most critical time in the Mission history was when an ordained Fijian minister and three Fijian teachers were barbarously murdered inland of Blanche Bay in New Britain, by the very men who had invited them to visit them, and assured them of their safety in so doing. This catastrophe threatened the destruction of the Mission, and the murder of the European traders with the remaining teachers and their families. The natives were thoroughly demoralized by the success of their attempt, and undoubtedly intended to add all other foreign residents to the list of victims. A determined stand was, however, made by the missionary, the few white residents, and the teachers, aided by a large number of friendly natives who were themselves grievously insulted and injured by the murder of their teachers. The skulls and bones of the murdered men were obtained in the houses from which the natives had fled on the approach of the expedition which was formed; the huts of the people were burnt by the friendly natives, and some of the murderers were killed. The towns implicated in the affair at once made submission, and confessed to the wrong which they had committed, a reconciliation was effected, and in two or three days the matter was ended. The natives fully admitted the guilt of their action, and highly appreciated the leniency with which they were treated. There is little doubt that great ultimate good has resulted from that painful incident. The towns implicated are all on the most friendly terms with the missionaries and the traders, and both parties reside among them in perfect safety. The returns from the district for the year 1890, show that forty-one churches have been built by the natives, of whom five thousand one hundred and sixty-six are attendants on public worship. There are thirty-nine day and Sabbath schools, with an attendance of one thousand two hundred and forty-eight, many of whom can now read and write fluently, and are well acquainted with the first rules of arithmetic. There are six hundred and fifty-seven church members, thirty-six of whom are employed as lay preachers and teachers, and one hundred and ninety-two on trial for membership. The Mission staff at present consists of two European missionaries and their wives, with thirty-nine native teachers from the Fijian, Samoan and Tongan Groups. The influence of the Mission is principally felt in the northern extremity of New Britain, the Duke of York Group, and the west coast of New Ireland where the stations are situated.

In the early part of 1880, an attempt to colonize New Ireland was made by a French expedition sent by the Marquis de Rays, under the command of Captain McLaughlin. They landed first at Port Praslin, but soon removed to a small bay, which they called Likiliki. They were landed from the ship *Chandernagore* with a considerable quantity of stores, but the vessel sailed away very suddenly, leaving the leader of the expedition, and without having landed some of the most essential articles. The colonists were soon attacked by the prevailing fever, and as they were without medicine, they suffered very severely. Many of them were also afflicted with dysentery and

ulcerous sores. They soon became disorganized, and nothing but work absolutely necessary for safety or shelter was attempted. Several attempts were made to get to the Mission Station at Port Hunter; and at length a party of three men succeeded in reaching the house of the teacher at New Ireland, who brought them across to the Mission Station. A relief party was at once organized, which found the colonists in a state of great misery and suffering, and in a short time about forty-five of the people were landed at the Mission Station. The resources of the establishment were most severely taxed by this large influx, especially as most of them were sick and required



SHELLING A NATIVE VILLAGE IN THE SOUTH SEAS.

great attention. Seven of them died on the Station, a few engaged themselves as traders, and the remainder were taken back to New Ireland, and thence to Sydney. Several other vessels containing large numbers of Italians and persons of other nationalities followed, but no permanent settlement was made, and the wild bush has again taken possession of the few plots of land which were cleared by the luckless colonists of these unfortunate expeditions. The principal trading stations now existing in the New Britain Group are those of Messrs. Hearnheim and Co. on Matupit, Mrs. Forsaith on Ralaun, and the German South Sea Land and Plantation Company, whose head station is on Meoko, in the Duke of York Group. Large quantities of copra, tortoise-shell and other South Sea Island products are collected and exported from the Group, but no trustworthy statistics can at present be obtained.

THE SOLOMON GROUP.

THIS fine Group lies between five degrees and ten degrees fifty-three minutes south latitude, and one hundred and fifty-four degrees thirty minutes and one hundred and sixty-two degrees twenty-eight minutes east longitude. It consists of a double chain of islands extending for over six hundred miles, most of which are yet imperfectly surveyed, whilst the interior is very little known. The principal islands in the south chain are Santa Anna, San Christoval, Guadalcanar, Savo, Russell Island and the Short-

land Group. In the northern Group are Ulaua, Malayta, Florida, Isabel, Choiseul, Bougainville and Bouka. Most of the islands are mountainous, and all are thickly wooded. In Bougainville, the mountains are ten thousand feet high, and in Guadalcanar they attain an elevation of eight thousand feet. An active volcano exists on Bougainville. These islands were discovered by Alvaro de Mendaña in the year 1567, but for two hundred years after that they were lost to the world, and very many indeed doubted their existence. Mendaña failed to find them again on his second voyage in 1595, and died at Santa Cruz. Fernandez de Quiros, who had been with him on his first voyage, was chief pilot on this second expedition, and afterwards sailed in command of another expedition in 1605, but he also failed. Roggwein, the Dutch navigator, was also unsuccessful in 1722 in his search for this lost Group, which defeated the quest of these adventurous mariners like the fabled Hy-Brasil of the early dreamers. Captain Carteret in the *Swallow*, sighted some of the Islands in 1767, but was not aware that he had discovered the long-lost islands of Mendaña. In 1768, Bougainville, the French navigator, discovered Choiseul, Bougainville and Bouka. Surville, in 1769, made several discoveries in the Group, but failed to identify the Islands as those originally discovered by Mendaña, and in 1788, Lieutenant Shortland sailed along the south side of the Group, and named several islands, headlands and mountains, but it was reserved for the patient investigation of geographers, notably M. Buache, in 1781, and M. Fleurieu, in 1790, to prove the identity of the discoveries of Bougainville, Surville, Shortland and others, with the Solomon Islands of Mendaña. The after voyagers who added to the knowledge supplied by the first discoverers were Lieutenant Ball in the *Supply*, in 1790; Captain Bower in the *Albemarle*, in 1791; Captain Manning in the ship *Pitt*, in 1792; and Admiral d'Entrecasteaux in the same year. During the first half of the present century, in addition perhaps to an occasional whaler or trading ship, the principal visitors were Captain Morrell in the *Margaret Oakley*, in 1834; Dumont d'Urville in 1838; Sir Edward Belcher in *H.M.S. Sulphur*, in 1840; and Mr. Boyd in the yacht *Wanderer*, in 1851. Mr. Boyd was killed at Wanderer Bay, in Guadalcanar. In 1847, Monseigneur Espalle, a French Roman Catholic bishop, was landed on Isabel, but was killed by the natives, as were also three French missionaries on the Island of San Christoval in the same year.

The importance of this group to Australia in the not very distant future can scarcely be exaggerated. Many of the islands are very large and contain extensive tracts of very fertile lands. On the north-west end of the Island of Guadalcanar there are large plains of well-watered lands, stretching far inland to the base of the lofty range in the centre of the Island. This land would unquestionably be very suitable for the growth of the sugar-cane, or any other tropical productions. The Island is reported also to be very rich in minerals, but as it has never yet been explored this is at present very little more than conjecture. Copper, however, has long been known to exist on San Christoval. The appearance of the Group on the charts gives little idea of the large number of islands and islets of which it is composed. A traveller coasting along the shores of San Christoval, then entering Marau Sound on Guadalcanar, then voyaging up the north side of that splendid Island, leaving the large Island of Malayta and the Florida Group to the right, sailing through the Russell, Rubeana (New Georgia), Villa

Lavella, Treasury, Shortland, and other Groups, would pass by a pretty large number of beautiful islands of ever varying shape and size, many of them quite uninhabited, and yet he would then have seen only a small part of the great Solomon Group. The extent and beauty of many of the islands in the Russell and Rubeana Groups can only be appreciated by those who, in some small steamer or sailing vessel, have traversed the deep, still, land-locked water-ways which separate these lovely islands. There are few places which present to the eye so many attractions to the explorer or to the yachtsman as this little known but most beautiful Group. The large islands have all a high mountain range in the interior, which is generally nearer to the south side than to the



A NATIVE DANCE BY SOLOMON ISLANDERS.

From a Sketch by Mr. T. C. Kerru.

northern one, so that the land is steeper and more broken on the southern side. The island is generally densely wooded from the very lap of the sea to the top of the range. On the south side the mountains often rise abruptly from the beach, with jagged and broken summits, and intersected with deep gullies and ravines which seem to terminate in many instances inland at the base of steep peaks, on the sides of which land-slips are plainly visible. Many small streams and rivers will be found, the large beds of which show that a great volume of water must find its way down them in the rainy season. On the northern side the land is generally more sloping, and often comparatively flat near the coast, whilst the thick brush is often broken by large tracts of open country covered with thick coarse grass. The climate is very enervating and unhealthy, especially during the rainy season. It is probable, however, that after the

system becomes acclimatized comparatively good health may be enjoyed with ordinary care. At all events, some of the traders resident in the Group have been able to remain there for a considerable number of years. The rain-fall is very heavy, and few vessels will get through the Group, especially during the north-west monsoon, without experiencing some of the drenching rain-storms which are so characteristic of these Islands. The annual rain-fall on the coast is about one hundred and fifty inches, and on the higher lands of the large Island it is probably at least double that amount. The range of temperature is not great, being only about twenty degrees. The *maximum* is not more than ninety-eight degrees, but seldom, if ever, lower than seventy degrees. The mean temperature for the year will be about eighty-one degrees or eighty-two degrees. The south-east trade-winds are fairly regular from May to November. During the intervening months the north-west winds prevail, and are often accompanied by very severe squalls and much rain, but there are no hurricanes as in the eastern groups. It may be noticed that the general opinion of old residents and sailors here, as in Eastern Polynesia also, is that the trade-winds are not at all so regular now as they were observed to be some years ago.

The formation of most of the Islands, so far as is known, is light-gray coralline limestone, overlying, in many places, a base of old volcanic rock. The whole region seems to be one of upheaval, and a close observation of some of the features of the Islands recently made by Dr. Guppy, of *H.M.S. Lark*, have apparently confirmed those made by Dr. Murray, of *H.M.S. Challenger*, and others, which go far to disprove the general applicability of the theory of Darwin as to the process by which coral islands have been formed. On Treasury Island the coral is found encrusted upon a volcanic peak which has been raised more than a thousand feet, and at Santa Anna the rim of the atoll has been raised some hundreds of feet above the present sea-level. The same formations are also to be found in the large islands of New Britain and New Ireland. The only true chalk yet found south of the Equator has been met with in the latter of these islands. It is cut out of the hill-sides inland, and far above the present level of the sea.

The people are of the sub-Papuan race, but vary a good deal in appearance in the different islands. The general characteristics, however, are: average height of men, five feet four inches, the women being about five feet; colour, a sooty-brownish black; hair tufted generally, but sometimes crispy; projecting brows with deeply sunk eyes, short nose depressed at root, thickish lips, and a receding chin. The men are bright and intelligent, learn to speak English readily, and when away from home make good workers. The women have pleasing features when young, but soon lose their good looks as they grow older. The chiefs have no absolute power as in Eastern Polynesia, nor is the title hereditary. A son does not necessarily succeed his father as chief. If he has plenty of money, and possesses many bewitching spells, and is also a brave or cunning warrior, he will succeed to the position, but not otherwise. Gorai, of the Shortland Group, is perhaps the only chief in the Solomons whose power or influence is like that possessed by an Eastern Polynesian chief. Cannibalism is practised amongst most of the tribes. The origin of the custom cannot be attributed to the scarcity of animal food. The natives eat the bodies of their enemies principally because they thus gratify

their feelings of revenge, or proclaim their victory. In many cases also they thus discharge an obligation which they owe to the spirit of some one or more of their



A SOLOMON ISLANDER.

friends who may have been killed by members of the tribe to which the victim belonged. Bodies are also eaten when a new *Tambu* House is finished. The houses are well built

of bamboo, cocoa-nut or *areca* palm, and are about twenty-five or thirty feet in length, by a breadth of fifteen or thirty feet, and about eight or ten feet in height. In some villages the houses are built on piles, and so raised about six feet from the ground. The *Tambu* House, however, is the largest and most important house in the village. It is generally about sixty feet in length, and twenty or twenty-five feet wide. Women are forbidden to enter it, the war-canoes are kept there, and skulls of ordinary men and the dead bodies of chiefs are also placed in it. It is always ornamented and carved with representations of sharks, canoes, human and other figures, and sometimes a fancy carving is made of the demi-god himself.

Head-hunting is the principal cause of the raids which are periodically made upon the large islands. Isabel has suffered more than others from this cause, and some horrible stories are told of the outrages which are committed on these occasions. The custom has its origin, doubtless, in much the same reason as that which makes a North American Indian estimated by the number of scalps hanging at his girdle. A man in the Solomons is praised and feared in proportion to the number of heads that adorn his house. It is also another instance of the wide-spread Papuan custom that requires human sacrifices on great occasions, such as the building of a house or the launching of a canoe, in order to propitiate the spiritual powers and to make the house strong, or the canoe successful. The custom of human sacrifices was very prevalent in Fiji in the olden days. In Isabel Island, where the natives have suffered most from the visits of the head-hunters, the need of protecting themselves from these raids has caused them to build tree-houses. One of the best descriptions of a house of this kind, is that given by the Reverend Mr. Penny. He says, "The tree in which the house was built must have been one hundred and fifty feet high. The lower branches had been cut away, leaving a bare straight stem below the platform on which the house was built, eighty feet from the ground. It was reached by a ladder." He was much surprised at the skill and neatness which the construction of the house displayed. The floor—smooth, flat, and perfectly clean—was made of split bamboos closely plaited; these had been laid on a layer of soft bark which again rested on the wood-work of the platform. The side walls were made of bamboos firmly lashed together, and the roof was thatched with the leaves of the sago-palm. A heap of sand on which to make a fire was kept in its place by a ruck of stones, and yams and water were stored in the house. The interior measured thirty feet, by fifteen feet wide. Forty people had once taken refuge there. When an enemy appears the women and children go up into these houses, where they are followed by the men if they have to flee from a superior force. Then they throw down large stones on the heads of the enemy. A large pile of these stones is always kept in readiness for defence on the platform outside.

The clothing of the natives is of very scanty description. The men generally wear only the small "T" bandage, and the women fringes of flax, which vary in length and quantity in the different islands. In many of the villages, however, the print or calico waist-cloth is now used. Their ornaments consist of armlets made of plaited grass or fern tissue, which are often neatly plaited in different colours and patterns; shell armlets of different sizes, which are also used as money; necklaces made of the teeth of dogs, porpoises, fruit-eating bats and phalangers; frontlets of cowrie shells, and almost anything

which can be worked up and worn as an ornament. The men generally appropriate everything of this kind for themselves.

The money of the Group consists of the large and small shell armlets, and strings made of pieces of shell ground down into very small rings, which are drilled and threaded. Ten yards of this will purchase a wife in Florida. The small money made in New Ireland is not much larger than small beads. It is much valued in the eastern islands of the Solomons. The weapons consist of bows and arrows, spears, clubs and tomahawks. The arrows are made of reeds, with a fore-shaft of hard heavy palm-wood inserted into the reed. During the attack upon the steam-ship *Ripple*, at Bougainville, one of these arrows, which was shot from a canoe some distance from the ship, pierced the steam-pipe, making a clean hole right through on both sides. The bows are from six to seven feet in length. A small shield is also used for defensive purposes. Food is plentiful, and consists of yams, *taro*, cocoa-nuts, bananas and other tropical fruit. A fine nut, known for trading purposes by the name of the almond-nut, is much used, and will doubtless be largely exported, as it produces a very fine clear oil. It is probably a species of the Malay *Canarium*.

The principal articles of export are copra, tortoise-shell, *bêche-de-mer* and ivory-nuts. Pearl-shell has been found, but not in sufficient quantities to employ professional divers for any considerable period. The principal trade is carried on by vessels trading from Sydney and Fiji. The Melanesian Mission occupies stations in some of the eastern islands, principally Florida. The Group has not been annexed by any of the Great Powers, but there is an agreement between Germany and Great Britain that in the western part German influence shall predominate, whilst the eastern islands of the Solomon Archipelago shall be subject to the supervision of English official authority, and thus practically constitute the British Possessions in this Group.

THE NEW HEBRIDES.

THIS group of islands, thirty in number, is situated between fourteen degrees twenty minutes to twenty degrees sixteen minutes south latitude, and one hundred and sixty-five degrees forty minutes to one hundred and seventy degrees thirty minutes east longitude, almost directly between Fiji and Northern Queensland. The Islands extend over four hundred miles from south-south-east to north-north-west. In 1606 they were discovered by the Spanish navigator, De Quiros, who thought that he had found the Southern Continent. He sighted the most northerly island, and anchored in a large bay in the north-west. Circumstances prevented him from making further exploration, but he landed, fixed the site of a city to be called "New Jerusalem," and named the land "*Tierra Austrialia del Espiritu Santo*." Bougainville, in 1768, proved the Continent of De Quiros to be an island, and discovered several others. But it was reserved to the great English navigator, Captain Cook, to discover the remaining islands of the Group in 1774, when on his second voyage to Polynesia. He spent forty-six days in sailing through the Islands, to most of which he gave the names, chiefly from native sources, which they bear on the maps, and he called the whole Group the New Hebrides. He gave a very accurate description of the Islands and of the natives in his

"Voyages." Little was added to the geography of the New Hebrides till Captain Belcher, in *H.M.S. Sulphur*, sailed among them in 1840, and Captain (afterwards Admiral) Erskine, in 1849, discovered Havannah Harbour. Captain Denham, in *H.M.S. Herald*, made a surveying cruise in 1833-4, of which the charted results proved of great value to succeeding voyagers.

The New Hebrides are volcanic islands, though situated between two of the largest coral groups. Volcanoes must have existed on almost all, as several show burnt-out craters, and all have volcanic rock. There are still three active volcanoes. Sailing from the south, the volcano on Tanna is a conspicuous object, with its pillar of cloud by day and its pillar of fire by night. It is the light-house to mariners. In the north, the conical Island of Lopevi and the mountainous Island of Ambrym have active volcanoes.* The line of volcanic action is exactly in the direction of the Group, and extends towards Banks Islands. There are fringing reefs of coral on most of the Islands, but no extensive surrounding reef, as the heat from volcanic action is destructive to the coral zoöphyte. The volcanic soil is rich and deep, and yields excellent crops of tropical fruits. The yams of Tanna are said to be among the largest in the Pacific.

There are several excellent harbours in the New Hebrides. In Aneityum there is the harbour of Anelgauhat, which has been surveyed by Her Majesty's ships, and of which a chart has been published. Dillon's Bay, in the north-west of Eromanga, is a safe anchorage. Fila Harbour, in Efate, affords large accommodation, and on the north is Havannah Harbour, a fine sheet of deep water seven miles long and two or three miles broad, almost land-locked by two islands which protect it. The entrance winds between high verdure-clad cliffs, while, farther up, the land lies in densely-wooded flats over which the inland mountains loom in the distance. Its great drawback as a harbour is its extraordinary depth, most of it being about fifty fathoms deep, so that there is practically no anchorage except close in shore. Mallicollo has a good port, and in Espiritu Santo is St. Philip's Bay, already described. The land rises to a great height on most of the Islands, and mountain ranges, wooded to their peaks, run through them, separated by vales of great beauty and fertility.

The natives of the New Hebrides are Papuan of a low type, with woolly hair. They present a striking contrast to the natives of Eastern Polynesia both in colour and in hair. They are coffee-coloured. Their manners and customs differ little from those of other Papuans, and even of other Polynesians. They were cannibals, and constantly fighting with each other until the missionary operations introduced more humane and pacific life among them. The population has long been rapidly declining by reason of their barbarous practices, their narrow limits of inter-marriage, by disease and deportations by the labour trade. Few children are born, and women are only sixty per cent. to the men. Though the estimate is conjectural, it is believed that there are not quite one hundred thousand in the whole Group.

The physique of the natives is small, but it improves in advancing towards the north, where also is seen a marked progress in barbaric art, alike in canoes, huts and unglazed pottery. In a few places, as in Futuna, Aniwa and in Fila Harbour, there are evident affinities to more Eastern races—with this peculiarity, that the marks now are more in the survival of Eastern forms of speech there than in physical difference.

There is no part of the world where there are so many languages within so small an area, or among so few people. There are at least twenty distinct forms of speech, though the Efatese language has various dialects in six or seven contiguous islands. On some islands two, and even three differing tongues have been found. The words are hard, long and full of consonants. Every syllable does not end in a vowel as in the Maori language. There are four numbers, single, dual, trinal and plural, and a double *we*, called by grammarians "*we* inclusive," and "*we* exclusive." Perhaps the labours of modern philologists may disclose a common origin of this polyglot speech. Many students of comparative grammar are now at work, and means are provided for them in the forty Melanesian tongues lately published by the Rev. Dr. Codrington, and twelve more added by missionaries in the New Hebrides. The verbs are something like the Hebrew in their moods, as Bishop Paterson pointed out some time ago. The natives reckon by fives, and find it difficult to go beyond the number of fingers and toes.

The seasons on the New Hebrides may be divided into wet and dry, as is common in tropical lands. The wet season lasts from December to April, when the sun is vertical and rains are abundant. The hydrometer then indicates a perfectly saturated atmosphere. The dry season extends over eight months, when rain is



HAVANNAH HARBOUR, NEW HEBRIDES.
From a Sketch by Lieutenant Field, H.M.S. "Nelson."

less frequent. The climate is not healthy, and induces fever and ague, though this is not so much felt by natives as by foreigners, European and Polynesian. Care has therefore to be taken to select heights for residences. The natives suffer from elephantiasis and skin diseases, from phthisis and from rheumatism. Foreign diseases, introduced by sailors, have occasionally made great havoc among them—as well as leading to the massacre of foreigners, and retaliation for the outrages thus caused inflicted on themselves by ships of war.

The most southerly island is Aneityum, which is mountainous and wooded, with ravines of verdure and beauty. Kauri pine and other good timbers grow in the interior, and at one time sandal-wood was plentiful. Fifty years ago the people were fierce cannibals, always engaged in fighting, and every woman was strangled on the death of her husband. "The climate," says Mr. Brenchly in his "*Cruise of the Curaçoa*," "is humid, in general agreeable, and to those that are careful, not unhealthy. The thermometer has never fallen below fifty-eight degrees, seldom below sixty-two degrees, while it has never risen above ninety-two degrees, and seldom exceeds eighty-nine in the shade." The same careful observer says that there are no venomous reptiles on the Island, but there are some large snakes. Many whales visit the coast in the winter season, and whalers had for a time establishments on the Island. The population is now scarcely one thousand. Tanna, fifty miles north-west, is a fine island, diversified with hill and dale, and with a table-land toward the north. It is thirty miles long by nine to twelve broad. The most conspicuous object is Yasur, the volcano, six hundred feet high, with a crater about two hundred feet deep, and very wide, so that its stones thrown up generally fall back into the fire. There is a large deposit of sulphur, which may be valuable to commerce. The natives of Tanna are of a dark coffee colour, slender, but firm and active. They have been found excellent workers in Queensland and Fiji, for which places many have left their homes. The population is thus diminished, and scarcely reaches five thousand. In this Island earthquakes are frequently felt, and have within the last twenty years nearly blocked up the formerly good harbour of Port Resolution, by the elevation of the rock.

The island of Eromanga is seventy-five miles in circumference, and shaped like a triangle. It has mountains and elevated table-lands. It was formerly noted for its sandal-wood, which was almost entirely destroyed by traders for export to China. This formed a matter of constant irritation to the natives, and many lives, both of white men and black, perished in the trade. The population is now not more than two thousand five hundred. The island of Efate, or Sandwich, is also about seventy-five miles in circumference, and diversified in scenery. Its terraced lawns, as they rose before the eye of Captain Cook, on approaching them from the north, seemed full of beauty. This Island is also fertile, and has been the chief centre of European settlement. Malli-collo, to the north, is sixty miles long and one hundred and sixty in circumference. It has hilly ranges running north and south, thickly covered with timber. In the centre of the Group is a cluster of smaller islands, which Captain Cook called "The Shepherd Isles," after his distinguished friend, Dr. Thomas Shepherd, the Professor of Astronomy at Cambridge. The Island of Api, to the north-west of these, is triangular, with its base towards the north-east. It is rich and fertile, and one of the finest in the Group. Ambrym is sixty miles in circumference and nearly square. Its central elevation is three

thousand five hundred feet, and the mountains are grand and picturesque. The volcano is active, and clouds of dust fall many miles at sea around. Aoba to the north is mountainous, with fine water-falls and beautiful scenery. The same may be said of Maiwo. Bougainville discovered it at day-break in 1768, and gave it the name of Aurora. The largest island of the Group is Espiritu Santo, which is seventy miles long by forty in breadth. Its mountain ranges are magnificent, some of them being, it is said, five thousand feet high. It is well-watered, and rich in vegetation. The natives are, perhaps, the finest both in physique and in art, but they are inveterate cannibals.

Missionary operations began among the New Hebrides in 1839, when the apostolic John Williams perished in his attempt to introduce teachers on Eromanga. In 1842, Messrs. Turner and Nisbet settled on Tanna, but, after many hardships, had to flee for their lives in an open boat. In 1848, the Rev. John Geddie settled on



A LABOUR VESSEL SHIPPING KANAKAS.

Aneityum, and in 1852 was joined by the Rev. John Inglis. In the course of twelve years, the whole Island became Christian, with fifty schools, under as many teachers, a large staff of elders and deacons, and the New Testament in print. In ten years more the Old Testament was printed, and the Shorter Catechism, an abridged "Pilgrim's Progress," Hymns, and a vocabulary were published. The natives paid for the printing of the Scriptures by contributions of arrowroot. In 1887, from this Island alone five thousand pounds of arrowroot, refined as that of Bermuda, were sent to the market. On Eromanga three missionaries perished by the violence of the people, but at length the Rev. H. A. Robertson has the whole Island covered by a net-work of teachers, natives of the Island and Christian converts, and he ministers in a church at Dillon's Bay, erected to the memory of the martyrs, where nearly two hundred are communicants. Aniwa, a low coral island, with a small population, was evangelized by the labours of the Rev. J. G. Paton. Efate is nearly Christianized, and many of the people have been taught to read and write. On Nguna there is a large band of Christian people who assemble in a neat church. On several of the other islands there are resident

missionaries, and schools are in operation under two hundred native teachers. Translations of the Holy Scriptures, in whole or in part, have been made, and printed in ten languages. The Mission is Presbyterian, and now has nearly twenty resident missionaries in the Islands. The Melanesian Mission of the Anglican Church, which pioneered the work on the northern islands, still operates on Aoba, Aragha and Maiwo on the north coast, and Bishop Selwyn has had several young men from these Islands in his institution at Norfolk Island. Recently Roman Catholic missionaries have settled at Mallicollo and



IN THE HOLD OF A SOUTH SEA LABOUR VESSEL.

other Islands in the north-west of the Group. They insist on the natives learning French. The other missionaries do not, as a rule, teach English, but use the native languages.

Trade first began in sandal-wood. The labour traffic then swept the Islands for recruits for the sugar plan-

tations in Fiji and Queensland. Settlers in some Islands attempted to introduce trade among the Islanders, but till missionary work prospered they did not want clothes, and only exchanged their produce for tobacco, guns and ammunition, fish-hooks, knives and beads. The French New Hebrides Company has recently acquired extensive tracts of land near convenient harbours, and has promoted a brisk trade in copra, *bêche-de-mer* and other things. The Company bought out most of the English settlers. The colonists in New Caledonia then began to desire the annexation of the Group by the French Government and the employment of convicts there. A military post was actually set up near Havannah Harbour, under the excuse that the French subjects who had settled there stood in need of protection. The natives, however, did not like this, and Australian colonists, who had already objected to the further sending of recidivistes to New Caledonia, many of whom escaped to the mainland, strongly protested against the military occupation of Havannah Harbour as a step towards the eventual establishment of a permanent settlement on the part of the French. Those interested also feared for the safety of the British Missions, and disapproved of the violation of the existing agreement, by which the English Government and France both agreed to abstain from establishing a dominion in these Islands. After long and anxious diplomacy, the French and British Governments agreed to appoint a mixed commission of naval officers to jointly administer justice and protect European interests, and the French troops were in consequence withdrawn.

An Australasian New Hebrides Company has been recently formed for the purpose

of purchasing land, promoting settlement and trade in the Islands, and for securing British commercial interests. An agent of the Company is resident on the Group. A saw-mill company has for some time been established on Ancityum, and has been doing a considerable amount of business. There are large forests of timber, especially on the northern islands. The planters, both French and British, have found difficulty in hiring labourers. While many Islanders have gone to Queensland, few are willing to be hired in their own places. The French settlers have introduced natives from the Solomon Islands and other groups, but regulations are wanting regarding such arrangements on the part of British subjects.



A TRADING DÉPÔT IN THE SOUTH SEAS.

Life is now comparatively safe on these Islands. Steam communication has been established with Australia. The Government of New South Wales, with the approval of the Legislature, has given a subsidy, not only to aid the maintenance of a

monthly steam-service between a port in the Islands and the colony, but also to assist in keeping a steamer sailing throughout the Islands, and conveying passengers and trade to meet the colonial line. This has been of great advantage to traders; and the Presbyterian Mission has in consequence sold the schooner which conveyed stores every half-year from the colonies to the missionaries, and cruised among the mission stations on the Islands. The contract with the Steam Navigation Company to do all the work of the Mission has not involved much more outlay than was required to maintain the schooner, while the communication between the colonies and the mission stations has been made more frequent. The French colony of New Caledonia has also a steam service between Noumea and the New Hebrides, while the *Messageries Maritimes*, subsidized by the French Government, have a steamer going monthly from Sydney to Noumea. The Australasian United Steam Navigation Company, which has the colonial Government subsidy, besides sending a steam-ship to the New Hebrides monthly *via* Noumea and on to Fiji, has established fortnightly communication with Fiji, and has also arranged to call at a port in the New Hebrides on the return voyage. These facilities for travel and for commerce have induced settlers to establish themselves on the Group with the hope of security to property and life. Some serious difficulties have arisen which require immediate attention, and at present one of these is the need of an authorized registry of title deeds to land purchased from the natives. Several years ago it was reported that the High Commissioner of the Western Pacific appointed by

the British Crown would be authorized to register deeds of property acquired by British subjects in the Islands over which his commission extended, especially as there was no single chief who ruled even one island. This was, after consideration, forbidden by the British Government. It was next expected that the Consul appointed to reside in the New Hebrides, especially as he was a Deputy Commissioner, would register titles, but even the Consul was unfortunately withdrawn. The British Consul at Noumea has, we understand, some care of British interests in the New Hebrides; but it is not a satisfactory arrangement; there ought to be one resident on the Islands. British subjects are at a serious disadvantage, though the joint commission of French and British naval commanders has some authority to adjudicate in cases of disputed title. This was formerly the case when British naval ships visited the Islands. But it is hoped that a registry may be established. Another difficulty has arisen from the unequal action in trade of the French and British Authorities. The French Government allows traffic with the natives in fire-arms and intoxicating liquors. The British Government forbids both. The sale of spirits to the natives ought to be prohibited by all civilized Governments to their subjects trading in the South Seas. With regard to fire-arms the case is different. Internecine warfare is growing less as European settlements spread, and as missionary work takes effect. There is not so great a tendency now to attack traders or settlers, as the visits of ships of war are more frequent. Besides, gun-shot wounds are probably less to be dreaded than wounds from poisoned arrows, for it has recently been proved that the arrows are dipped in some telluric poison, which causes *tetanus*. The Islanders in the less civilized parts will not sell land except they get payment in muskets and ammunition. Thus, while the French New Hebrides Company could purchase largely because they could give muskets in exchange, the Australasian New Hebrides Company and other British settlers were refused because they could not legally offer fire-arms as purchase money. This has been very discouraging to British trade. The New Hebrides Mission Synod adopted the following resolution with reference to the forementioned difficulties:—"This Synod, being of opinion that the time has now arrived when it would be conducive to the civilization of the natives of the New Hebrides, especially of those who have already embraced Christianity, that British subjects should be encouraged to settle in this Group as traders and planters, and that the present laws affecting this Group are so inadequate and unequal as to deter the most desirable class of colonists from settling in this Group, strongly urges that the Imperial Government be moved to provide that British subjects in the New Hebrides may be enabled to obtain legal titles to their lands, and also enabled lawfully to engage the natives of one island of this Group to labour upon another. This Synod is further of opinion that the prohibition of the sale of fire-arms and ammunition to natives of this Group, at present laid exclusively upon British subjects, should either be rescinded or applied universally to the subjects of all nationalities."

The facilities and restrictions to trade ought to be equalized by the great countries which are joint protectors of the Group. Representations have been made on the part of traders and of missionaries to some of the Australian Governments on this subject. In the colony of Victoria it has led to action, and both Houses of the Legislature and the Melbourne Chamber of Commerce have passed resolutions on the subject. When the

Federal Council assembled at Hobart, the chief interest of the meeting centred in the debate on the resolution with reference to the New Hebrides, submitted by the Attorney-General of Victoria. The Council was unanimous in agreeing to that part of the resolutions which affected the restrictions on the traffic with the natives in liquor and fire-arms. The proposed political federation of the Australasian colonies may have to deal with this matter, if it be not settled by the mutual arrangement of France and England. It is natural to expect that another difficulty will cause even



NATIVE DRUMS IN THE NEW HEBRIDES.

more interest, if not alarm. Indeed, it has been felt for some years that a great danger menaces Australia from the deportation of the worst kind of convicts from France to New Caledonia. Some of these when the terms of their sentences have expired, and others when they make their escape, land upon Australian shores. It is well known that hundreds have already found their way to the chief cities of Australia on the eastern coast, and that some have committed crimes. A request has also been made by French settlers in the New Hebrides to be allowed to hire convicts to labour on the Islands. The French Senate actually passed a law authorizing the transportation of one hundred thousand of the worst convicts to New Caledonia. When the great outcry arose from the Australian colonies against this, it was not carried out. But subsequently a law was passed authorizing the transportation of sixty thousand convicts without specifying their destination; and in consequence of this it has been reported that the French Supreme Colonial Council has recommended that colonizing and trading companies should be allowed to employ convicts in the Pacific. This would endanger British

interests alike in trade and in the missions on the Islands, and would be a source of annoyance to all the colonies of Australia. A strong protest was at once raised against it by the veteran missionary, the Rev. J. G. Paton, and the Press supported it in some measure. The *Sydney Morning Herald* said that "Whatever rights the French Government may claim to exercise in New Caledonia, it can hardly claim a right to convey its criminals to islands that are not French territory, and there practically to let them loose. The British Government would at least be justified in strongly protesting against such a proceeding as an unfriendly act. Experience has shown that notwithstanding all precautions, escapes are made from New Caledonia to the colonies of Australia, and to permit the employment of convicts on other islands where there is no penal establishment and the same precautions should not be maintained, would be almost equivalent to landing them there and giving them their discharge."

The British colonies are deeply interested in this, apart from the claims which discovery, survey and missionary operations on the Islands may give. The Islanders, who prefer British protection, would be imperilled by the convict element among them, and a great wrong would be inflicted on all the humanizing and religious agencies at work among the natives. The free colonies of Australia would be seriously disturbed by it. There is little doubt that the native population of the New Hebrides is rapidly diminishing, and will soon cease to be. The Islands are fertile, and capable of producing many tropical fruits. As they are so contiguous to Australian shores they will attract European settlers, and may soon become, like Fiji and New Caledonia, a European colony.

THE FIJIAN ISLANDS.

THE Fiji Group (properly Viti) lies between the fifteenth and twenty-first parallels of south latitude, and longitude one hundred and seventy east to one hundred and seventy-eight west, the meridian of Greenwich passing through Taviuni, in the middle of the Group. It consists of more than two hundred islands, some of which are of considerable extent with a numerous population, while others are mere islets of sea-sand and rock, many of them uninhabited, and visited only occasionally by the natives for fishing or other purposes. The largest island is Navitilevu (Great Viti); the first syllable, *na*, which is the definite article, showing that Viti was at one time a common noun, with a meaning now lost beyond hope of recovery, which, if it could be recovered, might tell us something of great value. Navitilevu is about ninety miles long, by fifty in breadth, and is—to quote a paper by Sir John Thurston—"nearly as large as Jamaica, twice as large as Trinidad, and six times as large as the Mauritius. Next in extent comes Vanua-levu (Great Land), one hundred miles long, but of no considerable breadth. The other inhabited islands vary in size from large islands like Taviuni, Koro, Ngau, Kandavu, Ovalau, and others, each with twenty or thirty native villages on it, down to the little islet with its one village and its four or five score of people. The entire land area of the Group is greater than that of all the British West India Islands."

A great barrier-reef, more or less broken, surrounds the Group to the eastward, northward and westward, closing in with the land to the south-west of Navitilevu, and leaving the southern quarter open. This barrier is broken by numerous passages; to

the eastward it consists merely of coral patches of greater or less extent, with or without islands upon them, between which vessels from the eastward, coming in under a clear sky, find easy entrance, but the navigation in those parts is dangerous in thick weather. In addition to the great barrier, nearly every island has an encircling reef of its own, many of which have commodious passages through them, and afford excellent harbours to a vessel that gets on the right side of them, but they are very dangerous to the mariner who is caught by bad weather on the wrong side. The general outline of the Islands is bold and striking. They look like, what perhaps they are, the mountain-tops of a sunken continent. Nowhere does Nature present a more beautiful picture than one



LEVUKA, THE ISLAND OF OVALAU, FIJI GROUP.

of the larger islands as approached from seaward on a sunny day. The bold background of wooded hills, with intervening valleys cut out by the numerous water-courses, or torn out by volcanic cleavage, the fringe of palms on the beach, with the brown roofs of the native villages peeping out of the green foliage, bordered by the narrow strip of "ribbed sea-sand," the still waters of the lagoon with their varied colours, and the white ring of encircling surf, present a picture of marvellous beauty. But it is always the same; the eye soon becomes satiated with it, and longs for the changing loveliness of an English landscape. As a general rule, the soil is not of good quality excepting on the river deltas, and the flats caused by the running streams; but scattered throughout the Group there is a large area of fruitful soil capable of bearing in abundance all sub-tropical products, and where good judgment is used in the selection of plantation grounds, the soil responds liberally to the demands of the planter.

The principal European settlements are at Levuka and Suva. Levuka is situated on the eastern coast of Ovalau, a considerable island within the Navitilevu reef, while Suva is built on a promontory between two extensive bays on the south coast of Navitilevu. Levuka is the earlier settlement, but the seat of Government was removed to

Suva by Sir Arthur Gordon, and since the removal Levuka has been dwindling both in importance and in population.

The history of Fiji may be said to begin in 1643, when Tasman passed through the Group, though there is some evidence that the old Spanish adventurers were there before him. Captain Cook discovered Vatoa, or Turtle Island, the easternmost island, and laid it down on his chart with his usual accuracy. Bligh sailed through the Group in his wonderful boat voyage after the mutiny of the *Bounty*, and subsequently a few shipwrecked or runaway sailors, and escaped convicts from Norfolk Island, managed to establish themselves here and there among the natives. But it was not until Christianity began to make its way under the influence of the Wesleyan missionaries



A FIJIAN MALE.

that anything like a considerable settlement took place. For many years vessels had been trading to Fiji for sandal-wood, trepang and tortoise-shell. Subsequently a few traders established stations for the purchase of cocoa-nut oil; and in 1858 Mr. Frederick Hennings, connected with the enterprising firm of Godeffroy, of Hamburg, came over from Samoa, and began operations on a more extensive scale. Later on, the cotton famine, arising out of the war in America, gave a great impetus to settlement, and a considerable number of gentlemen came from Australia to engage in cotton planting. At this time Thakambau, who was in reality *Wunivalu*, or war king of the Mbau *matanitu*, but who was styled King of Fiji, was in difficulties with the United States Government, who claimed from him some nine thousand pounds as compensation for injuries said to have been inflicted many years before on certain American citizens. A company formed in Melbourne paid off this claim, and Thakambau readily presented to them about two hundred thousand acres of land, on much of which he durst not set his foot at that time without a strong band of warriors at his back. A number of settlers came down under the auspices of this company, and the stir made at the time attracted still further attention to Fiji. Disputes arose with the natives, and the want of some regular form of Government soon made itself felt. An absurd attempt was made to form a constitutional Government, with the usual Parliamentary machinery; Thakambau was crowned King of Fiji by a few irresponsible adventurers, and the Parliament began its talking business. Affairs did not go smoothly, and when the legislators of the new Government under "Thakambau Rex" had got things into inextricable confusion, Mr. John Bates Thurston

was called by the popular voice to the head of affairs. This remarkable man came to Fiji in 1865 from Rotumah, where he had been shipwrecked while on a collecting expedition. Captain Cook, V.C., then H.B.M. Consul at Levuka, attached him to the consulate, and, recognizing his great ability, recommended him as his successor. Mr. Thurston received his appointment as Acting-Consul, which he held for some time, and then retired to a plantation of his own, where he remained until he was called upon to take charge of affairs under "Thakambau Rex." He continued at the head of the Government until Fiji became a British Colony; and the story of his difficulties there would make a book well worth reading. It must suffice here to say that, after long battling with political and financial difficulties, he saw that the only way out of them was to call in the aid of the British Government, and a formal offer of cession was made by the chiefs through him. Commodore Goodenough and Mr. Edgar Layard were sent as Commissioners to inquire and report, and finally, in September, 1874, the British flag was formally hoisted by Sir



A FIJIAN FEMALE.

Hercules Robinson, Governor of New South Wales, who represented Her Majesty on that occasion, and the group of islands known as the Fijis became a British colony.

Sir Arthur Hamilton Gordon was appointed as the first Governor of the new colony, and landed in Fiji on the 24th of June, 1875. After a time, Mr. Thurston was made Colonial Secretary under him, and retained that position until he was raised to the Governorship of the colony. No one has been more intimately connected with Fiji than he, and to no one does a greater share of credit for its political and commercial development belong. When Sir Arthur Gordon arrived in Fiji, the greater part of the preliminary work had already been done. The formerly cannibal tribes had been won to Christianity by the labours of the missionaries, and the strength of the hill tribes of Navitilevu, who alone remained in their heathen state, had been broken by a sharp and decisive war, which, by their murderous raids, they had compelled Mr. Thurston to carry on against them. Sir Arthur's work would have been much harder were it not for that which Mr. Thurston and the missionaries had already done, and what he did himself was made much easier by the fact that he had Mr. Thurston to help him to do it. Sir Arthur Gordon was removed to the Governorship of New Zealand in 1880, and was succeeded by Sir William Des Vœux. He was followed by Sir Charles Mitchell, who earned the respect of all classes of men during his brief stay in the Group; but the great commercial depression, consequent on the fall in the price of sugar, made a more economical arrangement imperatively necessary, and Sir John Bates Thurston, K.C.M.G., was appointed to the Governorship, his long experience and special knowledge

qualifying him to take upon himself the control of the Colonial Secretary's office as well as to hold the reins of the Government. Fiji owes much to the present Governor of British New Guinea, Dr. Sir William MacGregor, who came out with Sir Arthur Gordon as chief medical officer of the new colony. Although an enthusiast in his profession, his remarkable power of organization, and of infusing his own indomitable energy into the public servants under him, was too valuable to be confined to the medical department. He held



A NATIVE VILLAGE OF THE FIJI GROUP.

a number of offices under the Government, had the work of each done in the best manner possible, and in the midst of his multifarious occupations he found time for scientific research, hygienic measures for the benefit of the natives, and even for teaching a number of young Fijians how to treat the forms of disease which are most prevalent in the Group, and to deal efficiently with many surgical cases. He did so much useful work in Fiji that even the briefest historical record should find place for his name. Nothing beyond a very slight reference to the work of Christian Missions in Fiji is possible here. The Wesleyan Mission was begun in 1835, and before the Group was annexed, all the natives, with exception of the hill tribes of Navitilevu, had abandoned heathenism; schools were established under native teachers in every village, and almost all the young people had

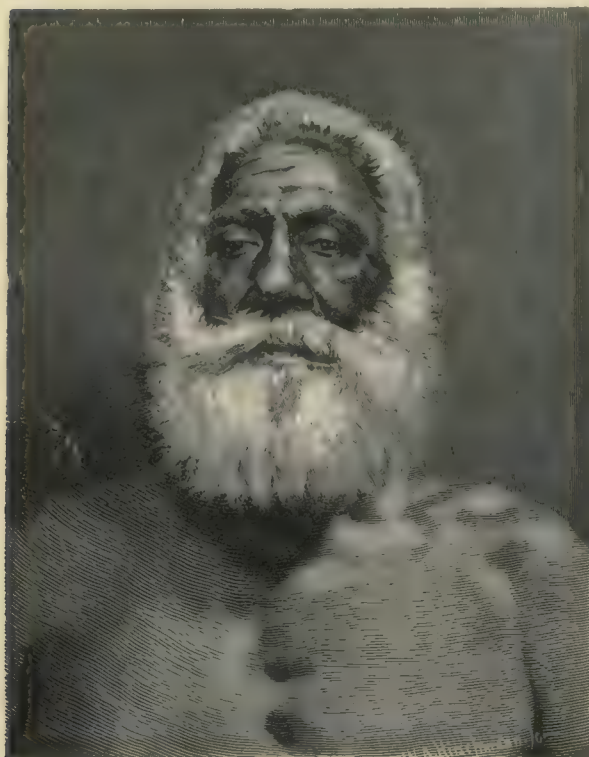
learned to read and write. A Catholic Mission also had been established for many years under the care of a few French priests who were devoted to their work, and no name is more respected in Fiji than that of good Père Brehéret, the veteran missionary at Levuka.

The climate during eight or nine months of the year, from April to December, excluding a part of November, is on the whole extremely pleasant. The heat is not excessive, being tempered by the steady trade-winds. On the larger islands a cool land-breeze generally sets in not long after sunset, and the thermometer never marks the excessive heat which it sometimes registers during the summer months in New South Wales and Victoria, while the general temperature is much lower than that of those parts of Queensland which lie within the same parallel of latitude. The range of the thermometer is remarkably small, being from sixty degrees to eighty-seven degrees in the shade, with a mean of seventy-seven degrees. The annual rain-fall varies considerably in different parts of the Group, but it may be roughly estimated at about ninety inches. The climate is by no means unhealthy, though doubtless relaxing, especially to the female constitution. Children of white parents, born and reared in Fiji, appear to be healthy enough; but they lack colour, and the early decay of even their milk-teeth, observed in many cases, shows that something else is lacking. Intermittent fever, so common in the groups farther north, was unknown in Fiji until imported specimens of it began to appear. Low fever also, which has been prevalent of late years, especially at Suva, is probably either an importation, or the result of the decay of vegetable matter consequent on the extensive clearings. Dysentery and phthisis are the most fatal diseases among the natives; ophthalmia, elephantiasis and leprosy appear in all parts of the Group. But though the natives seem to be especially liable to phthisis, the equable



A FIJIAN MOUNTAIN CHIEF.

temperature has been found to be very favourable to sufferers from pulmonary disease among our own countrymen, and consumptive patients have derived great benefit from a residence in Fiji. The months of January, February and March form the most unpleasant part of the year. These are known as "the hurricane months," and are generally wet, muggy, and full of the dread of the impending storms. Men's spirits rise with the



THE FIJIAN KING, THAKAMBAU.

aneroid when the sun crosses the line in March, for a hurricane has rarely been known in Fiji after the vernal equinox. These storms begin to blow from the eastward, work round to the west, north about, and generally blow themselves out in fierce blasts from the south-west. They are very destructive; and yet it is a question whether they do not effect more good than harm. They clear away much of the excessive vegetation, and destroy a vast quantity of noxious insect life. After one of them has done its worst the air is full of ozone, and has a wonderfully exhilarating effect; and, though much injury is done to the growing crops, it is observed that the next yield of the fruit-bearing trees is always especially abundant; while in the years that are free from hurricanes the crops are not so plentiful, and overwhelming insect plagues occur. Still, on the

whole, the white resident who can afford it prefers to betake himself to other climes during the rainy season, and then to return and enjoy the blessings which follow the hurricane after its violence has worked itself out, and its effects have passed away.

The native population of Fiji some seventeen or eighteen years ago was, in round numbers, about one hundred and fifty thousand; but the plague of measles, brought by British ships almost immediately after the annexation of the Group, swept away thirty-five thousand of them, and their number is now estimated at one hundred and fifteen thousand. They are a people of good physique, and often with fine, open, intelligent features. Their language is distinctly Melanesian as distinguished from the Polynesian tongue, and yet in physique they are much superior to the ordinary Melanesian type. Whether this fact is owing to their intercourse with the Tongans, and to the consequent admixture of Polynesian blood through them, is an open question. It is, however, certain that there is much of the Tongan strain in many parts of Fiji.

The Fijians are generally described as a frizzly-haired people, but this is a mistake. The frizzled appearance of their hair is owing to the custom of dressing it with lime or clay, which dries it up, and alters its colour to a reddish-brown; but the hair may be seen in its natural state on the heads of children, and shows itself to be black with a purplish tinge, and often with a wave or ripple, rather than a curl in it. The skin of the Fijians varies in colour from a light brown to a full black, and is harsher than that of their Polynesian neighbour. Sir John Thurston considers them to be "a branch

of the Oriental negro or Kalœonesian stock, having a close affinity to aboriginal races still found in India, the jungles and heights of Ultra-India, Malaya, Luzon, Sumatra, and as far east as Japan." The hill tribes of Navitilevu, or *Kai Tholo*, as they were called, may perhaps be taken as specimens of the purer Fijian race, who lived in fortified villages (*koro*) surrounded by moat and mound and double stockade, the planting grounds being generally as near as possible to the village. A number of these *koro* made up what was called a *matanitu*, a term generally rendered, for the want of a better, by the word "kingdom." These *koro* were of unequal *status*. One of them, where the chief clan dwelt, was called the *koro-turanga* (*koro* of chiefs), and the others owed more or less tribute and service to it. The clans in some of the villages were called *Mbati* (Borderers). These gave service in war, for which they were paid by feasts and presents. The people of the other *koro* were *nggali* of various grades, down to the husbandmen, who were called *lewe ni vale-ni-kuro* (people of the house of pots, *i.e.*, the cook-house), or, in one instance at least, *lewe ni kuro* (contents of the pot), a title which the chiefs had power to verify in actual fact if they wanted a man for a feast and could not conveniently get one elsewhere.



KING THAKAMBAU'S HOUSE.

These *matanitu* were usually at deadly feud one with another. Their normal condition was war, broken by occasional intervals of peace, and the boom of the big wooden war-drum was always sounding somewhere or other in the Group. A cause of war was never lacking, for the blood feud was a religious institution, and new occasions of offence were continually occurring. Perhaps the most prolific cause of war was the jealousy between the chiefs themselves, arising out of polygamy. Sons of a great chief, whose mothers were *marama* (ladies of rank), being all qualified to succeed him, naturally looked upon their half-brothers as rivals whom it would be well to get out of the way. Their respective mothers taught them this lesson from their earliest boyhood, with a success which is terribly shown in the fact that the language has a word for "murderous hate between brother and brother." Their chief weapons were the club and spear. The bow and arrow also were used, but not to any great extent, excepting as a boy's play-

thing, or for shooting fish. The word for bow, *ndakai*, is now used for gun, but the common South Sea word which appears in other groups under its various forms of *vusu*, *wusu*, *wus*, *us*, is found in some parts of Fiji as *vuthu*.

Society was organized on the patriarchal basis, descent and inheritance being through the father in most of the tribes—though some of them, especially on the island of Vanualevu, still adhered to the older rule of descent through the mother—for birth was necessary to the *status* of a land-owning commoner, and illegitimacy was a permanent disgrace. The bastard had no footing in the community excepting on sufferance. The Fijians were an industrious people in their own way, which is not ours. They



KING THAKAMBAU'S CANOE.

were skilful agriculturalists, they built comfortable houses, made an excellent pottery capable of standing fire when used for cooking purposes, and their carpenters built sea-going canoes before they knew anything about iron tools. They also made a useful cloth from the bark of the paper-mulberry, on which they painted and printed from carved

wooden blocks patterns of considerable elegance. Their spears and clubs also showed much taste and untiring patience in their manufacture and ornamentation. The women were the potters and cloth-makers, and they made also serviceable fishing-nets, which they used with great dexterity. A large strong net was made by the men from cocoa-nut fibre, which they plaited into an excellent three-strand sinnet. They likewise constructed large weirs, in which great quantities of fish were taken. The tribes kept up a system of barter, one tribe exchanging with another commodities the making of which was their hereditary occupation. Thus there were salt-making tribes who had no potters, and potters who had no salt-makers. The notion of engaging in occupations which their fathers did not follow does not seem to have occurred to them. Such an innovation would have been deemed nothing less than impious. The son had to do what his father did, and exactly as his father did it. Departure from ancient custom would be an offence against ancestors, and their wrath would be felt by the whole community. Land was held on an enduring tenure, the title being vested in the tribe, though the various plots were partitioned out among the *taukey* or land-owners. Each generation had the usufruct only, and the land could not be permanently alienated excepting by the collective act of all the tribe. Under these circumstances, the heir—that is, posterity—was distinctly

concerned, and was justly taken as a consenting party. In their heathen state the Fijians were a religious people, their gods were ancestral, and they were assiduous in their cult. In many of the tribes a certain clan called the *mbete*, or priests, was the recognized medium of communication with the gods. Every full-born male of the clan was a *mbete* by birth, but some one of them would be chosen by the ancestral spirits as the



THE REWA RIVER, NAVITILEVU ISLAND.

mbete for the time being. Their choice was declared by the man becoming inspired, a process which threw him into strong convulsions, accompanied by physical phenomena horrible to witness. The chief articles of food were yams (*ndalo*), elsewhere *taro* (*arum esculentum*), bananas, sweet potatoes and sugar-cane. They had also fruit-bearing trees in abundance, cocoa-nuts, bread-fruit, various kinds of chestnut, and other fruits. Wild yams and edible roots were also plentiful in good seasons. Fish was their principal addition to the vegetable diet; for though they had both fowls and pigs when our own people first came into contact with them, these were delicacies not for every-day consumption, and the native words for them show that they were not indigenous. The practice of cannibalism was universal in Fiji, as far as the males were concerned. Women were not permitted to share in these feasts, at least it was not considered proper in them to partake, but many of them are said to have indulged their appetite in secret. The prevalence of the custom has stamped its mark on the language, which contains a considerable number of cannibal words.

The soil and climate of Fiji are suited to the cultivation of all sub-tropical products. South Sea Island cotton of the finest quality in the world, and of a very high market value, has been produced; the sugar-cane also grows luxuriantly, yielding juice of a good density, and maize gives two crops in the year; the banana, which has proved

itself a valuable article of export, is easily grown, and yields abundantly; tea and coffee of excellent quality can be produced; the cocoa-nut and other oil-yielding nuts flourish, and Sir John Thurston, who has given the subject much attention, has demonstrated that the most valuable spices can be cultivated. And yet, in spite of all its natural capabilities, Fiji has not given a generous return to the investor. It must, however, be taken into consideration that most of the settlers were men who brought very little



SIR JOHN BATES THURSTON, K.C.M.G.

capital or practical experience for investment in the new colony. But, on the other hand, few men of those who were better qualified as pioneer settlers have been able to make head-way against the difficulties with which they were beset, and neither to the worker nor to the capitalist has Fiji proved a good investment. Of all the difficulties, perhaps that of labour is the greatest. The Fijians themselves neither can nor will supply the wants of the settlers as constant workmen. Their own requirements are so few, and so easily satisfied, that they have no motive for engaging in regular monotonous work throughout the year. Moreover, even if the able-bodied men were willing, there are not enough of them to fulfill their tribal obligations, and to supply the planters as well. Labour, therefore, has to be imported either from the other groups to the northward, as

far as New Guinea, or from India. This is a costly operation, and it will be perceived that as a considerable amount of capital is required, Fiji is no place for men of small means. Whether, as time goes on, it will remunerate the capitalist or not remains still an undecided question.

It has been amply proved that excellent cotton, tea and coffee can be grown, but then, excellence of quality does not do away with the fact that their growers have not been able to make them pay. Some years ago sugar, at the price it was then bringing, offered a certainty of a splendid profit, and very large sums were invested in mills, machinery and plantations, especially in the splendid sugar districts on the banks of the Wailevu (Great Water), or "Rewa River." But with the fall in the price of sugar the broad margin of profit, the prospect of which presented itself as a temptation to the capitalist, has dwindled down. Copra—the dried cocoa-nut—is a valuable article of export, and can be produced to almost any extent. The returns are not so speedy as are those of the sugar-cane, for the palm requires several years to come to full bearing, even under the most favourable circumstances; but when a cocoa-nut plantation is once established, it goes on yielding year after year with comparatively little outlay. Of minor products the banana is an article of export of some value, though its perishable nature makes the ventures in it somewhat hazardous, and the Australian market does not offer room for any great extension of trade. Pea-nuts are easy of cultivation, and extremely

prolific. The coral reefs afford a considerable quantity of *bêche-de-mer*, but the gathering of it has been stopped by the Government in the interests of the natives. There is a large quantity of good timber, some of it probably of considerable value, but it is not likely to come into the market to any great extent, forest conservation being especially needed in a country such as Fiji. One of the most remarkable of the native trees in



THE BACKA TREE, FIJI ISLANDS.

the group is the splendid forest specimen known to the Fijians as the *backa* tree, which grows to an enormous height, and attains an extraordinary girth measurement. Spice cultivation will probably be attempted if Sir John Thurston can prevail upon qualified persons to take it up, but the losses which the cotton and sugar planters have already sustained make our capitalists extremely shy of new investments. The losses

that enterprising colonists have at various times experienced from this cause have led to a certain feeling of diffidence in the possibilities of the country. Fiji is now at what seems to be its lowest ebb, and any change will probably be a change for the better. There can be no doubt that it is a country of splendid capabilities, but a heavy cloud of commercial depression at present rests upon it. This will without doubt pass away in due course; but whatever the future of the colony may be, the demand for native labour must stand in the way of the formation of a large white population.

THE SAMOAN GROUP.

THIS large Group is situated between the parallels of thirteen degrees thirty minutes and fourteen degrees thirty minutes south latitude, and one hundred and sixty-nine degrees thirty minutes and one hundred and seventy-two degrees fifty minutes west longitude. The principal islands, beginning from the east, are the Manua Group, Tutuila, Upolu, Manona, Apolima and Savaii (the largest), with a number of other small islands and islets. Savaii is about one hundred and fifty miles in circumference. It is of volcanic origin, and from the appearance of some of the craters inland it is probable that, with the exception of the submarine explosion which occurred some few years ago near Tutuila, the latest instances of active volcanic eruption were on this Island. The interior of the Island is very rough and broken, and covered principally with *scoria* and lava beds. There are only one or two small streams on the Island, but fresh water can be obtained at most of the coast villages. The mountains are between four thousand and five thousand feet in height, and can be seen from a considerable distance. The harbour of Matautu is the only one at Savaii within which large vessels can anchor, but it is very unsafe during the rainy season, being exposed to the full force of the north-west winds. Upolu is the most beautiful and the most fertile island in the Group. It is about one hundred and thirty miles in circumference, is well watered and very fertile. Apia, which is the principal port in the Group, is situated on the north coast near the centre of this Island. Tutuila is forty miles to the eastward of Upolu. It is about eighty miles in circumference, and contains the splendid port of Pango Pango, which is one of the safest and best harbours in the Pacific. Manono, which is situated between Savaii and Upolu, is a pleasant island, and has been called the garden of Samoa. It was for many years the ruling power in the Group, and is still of considerable importance. The people of Manono acquired their supremacy principally from the fact that they were the possessors of a powerful fleet, and had also the natural impregnable fortress of Apolima to flee to in any time of great danger. All these islands of the Group are very fertile indeed, and all tropical fruits can be grown here in abundance. During the American War a great stimulus was given to the cultivation of cotton, and large quantities of a very superior article were produced, but on the conclusion of the war and the restoration of trade with America, it was found that the difficulty of obtaining labour prevented the profitable production of the article at the prices which have since ruled in Europe. There are some fine streams of water at Upolu, and at Apia all vessels can water with comparative ease and expedition.

Samoa was originally discovered by the Dutch navigator Roggewein, in 1721. The

French navigators, Bougainville and La Pérouse, also visited the Group in 1768 and 1787. The name "Isles of the Navigators," was given to them by Bougainville from seeing the natives sailing far out at sea in the smart dolphin fishing-canoes, which carried a large sail and were most cleverly managed. Some specimens of these fine canoes were still in use a few years ago on the north coast of Savaii, but it is doubtful whether there is one left at the present time. M. de Langlé, another officer, and ten of the crew of La Pérouse's expedition were killed by the natives of Tutuila at Massacre Bay. There is, however, no doubt that this was the direct result of an outrage committed on board the ship. One of the natives was shot and mortally wounded for some real or



APIA, UPOLU ISLAND, SAMOAN GROUP.

supposed act of pilfering, and when he was taken on shore, his friends there, actuated by revenge, attacked the men of the boat's party who were on the beach at the time, and killed them. This unfortunate affair, the real facts of which were not known for some years, caused the natives to bear a very ill name, especially as La Pérouse's opinion that they were a set of barbarous assassins was in some measure confirmed by a report of the visit of *H.M.S. Pandora*, in 1790. It is very certain, however, that both these reports were incorrect, and that the natives were very far indeed from being the ferocious savages they were long represented to be in the early navigators' stories.

The Samoans belong to the pure eastern Polynesian race, and are kindred with the Sandwich Islanders, Tahitans, Rarotongans, Maoris, and others. These people have often been called the Malayo-Polynesian races, but the theory involved in this name does not appear tenable. The probability is that the Polynesians proper are a separate and distinct race from the Malaysians, and the opinion held by Judge Fornander and others that they were the original inhabitants of Malaysia, prior to the irruption of the Malays from the main-land, is accepted by many as being more in accordance with the facts than the theory originally held. The question of their affinity, or otherwise, with the sub-Papuan or Melanesian races is one which is attracting the attention of anthropologists at the present time, and on which, it is needless to state, very varying opinions are held. However, the extended knowledge of the languages, manners, and customs of the Melanesian races, which has been gained of late years, has, in the opinion

of many, tended to prove that there is no insuperable obstacle to the assumption that both the eastern and western Polynesian natives are descendants of one common stock, of which the Papuan is probably the oldest representative. The people are of a light coffee colour, with wavy hair, and have pleasant features and manners. They are in general of large stature and well-formed, and are naturally a kind, friendly and very



A MAIL STEAMER AT TUTUILA.

hospitable people. The houses of the natives are of a bee-hive shape, and many of them are exceedingly well constructed. The two sides and the semicircular ends are each made separately, and can be easily detached, and removed in four pieces to another site. The ribs and beams of the best houses are made from the wood of the bread-fruit tree, and are very light and lasting. The sides of the houses are open during the day, but are closed at night by blinds made from the plaited leaf of the cocoa-nut. The floor is formed of small gravel, and is generally kept very clean. A roll of mats, large mosquito nets, a circular fire-place, a box or two of European manufacture in which clothes are kept, a *kava* bowl and a lamp constitute the principal furniture and effects. The carpenters form a regular guild, with rules and regulations, which, amongst other things, prevent any carpenter from finishing or interfering with the work of any other tradesman. The ordinary clothing of the people in former days was a leaf girdle made from split *dracæna* leaves and the native cloth or *tappa*. Beautifully marked and painted pieces of this cloth were much used on festive occasions, and also formed a considerable part of a dowry of a bride. It was, however, in the manufacture of mats that the Samoans most excelled, and these are still the most valued of all their possessions. The fine mat of Samoa was made of the leaves of a particular species of *pandanus*, very finely scraped and carefully prepared. These mats were made by women, and often occupied their spare time for years before they were finished. Some of the oldest and dirtiest mats in the Group are still the most valuable, and are most carefully preserved. They have names given to them which are well known, and their whole history is familiar to their possessors and others. A mat which has been the principal one in the

dowry of a great lady, or which has been presented as a peace-offering at the conclusion of a war, or on any other special occasion, has its value very much increased thereby, and the fact is carefully recorded. These mats are trimmed with the red feathers of the Fijian parrakeet, which for this reason was much prized by the Samoans. The Tongans were always anxious to secure these mats, and some of the best specimens are now to be found in that group. A shaggy white mat was also made from the bark of a dwarf *hibiscus*. This was generally worn by a bride at her marriage.

Polygamy was much practised by the chiefs, more especially as it was encouraged by the heads of families and followers of these potentates, for the sake of the property given with the lady and the attendant feasting. Very often the wife remained only for a short time with her husband, and, except in cases of certain high chiefs, there was not much notice taken of her if she chose another husband, after her own husband had taken to himself another wife. Adultery, however, was often very severely punished. Tattooing is practised, and until a young man is tattooed he is considered to be in his minority. The whole of the lower part of the body, from the navel to the knees, is covered with very elaborate and pretty designs. Some of the early navigators, who saw the natives at a distance, reported that they wore breeches of some dark silken close-fitting material. The operation is performed by professional tattooers by means of small combs of different sizes, made from human bone, which are dipped in lamp-black and water, and struck into the skin with a small mallet.

A modified form of circumcision is practised upon youths from eight to ten years of age. It has, however, no religious significance. The system of *tabu* was fully carried out in this Group. The usual form observed in making a grove of cocoa-nuts for-bidden was to tie a piece of nut-leaf round some of the trees. Sometimes



THE HARBOUR OF PANGO PANGO, TUTUILA.

this was plaited to represent a shark, and was really an imprecation to the effect that any thief should be eaten by a shark when he went to swim. Other imprecations of a like nature had their appropriate signs. Pigs were generally made *tabu* at a *fono*, or meeting of the town or district, and no one could kill any of his own pigs whilst this was in force. The religion of the Samoans did not differ much from that of Tonga, which will be hereafter described. Cannibalism has not been practised for many years, and the natives deny that they ever indulged in the practice, but their own legends, and the customs observed by them in making submission and suing for peace, show that in olden days it was certainly

not unknown amongst them. The arms of the Samoans consisted of clubs and spears, but of late years they have become possessed of the most approved rifles and guns, with which their wars are now carried on. Wars were always frequent, and for many years past there has been no settled peace in the Group. The principal food productions of the Islands are cocoa-nuts, *taro*, yams, bread-fruit, bananas, and sweet potatoes. Pigs,



THE SAMOAN KING, TAMASESE.

fowls and fish are very plentiful, and all tropical fruits can be grown in abundance. The guava, orange, custard apple, pine-apple, mango, etc., have been introduced and thrive well. The Islands are comparatively healthy, though the high temperature, averaging eighty degrees during the year, and the great moisture of the atmosphere are very enervating to most Europeans. Elephantiasis is very prevalent, and few escape its effects. The Group is subject to severe hurricanes, which occur generally from December to April. The most dangerous season is the first three months in each year.

The language of the Samoans is probably more soft and musical than that of any other Polynesian race. It has also, more than any other dialect, a distinct vocabulary of words

which are always used in addressing superiors, and on other occasions of ceremony. No one can properly speak Samoan who is not thoroughly conversant with the polite form of words as well as the form used in ordinary intercourse. The rule is that a person must always use the common word in speaking of himself, but the polite form must always be used by another in addressing him, *e.g.*, *gasegase* (polite form) and *ma'i* (ordinary) both mean sickness. Any person asking after the health of another, would use the former word, *gasegase*, but the one questioned would use the latter word in reply. *Finagalo* (polite form) and *loto* (ordinary) mean will or opinion. "What is your *finagalo* about this?" would be the question; the reply would be, "My *loto* is so-and-so." The names of many articles which it was not considered polite to mention, were changed to something which was the direct opposite, *e.g.*, fire-wood was called banana-stem; a knife was a nut-leaf; a pig was called *pusi*, a cat, etc. When it was necessary to use the word which was not considered polite, it was always prefaced by an apologetic phrase. The Polynesian custom of changing the name of any object when the name had been appropriated by a chief, was very common, *e.g.*, *pe'a*, the flying-fox, becomes *manulagi*, or heaven bird or animal, in all the districts of which *Pe'a* is the chief. *Talo* is not used as the name of that vegetable in another district, because the chief had taken the original name. *Fiti* is not used in any form in another part of Savaii, because Tui Fiti was one of the old sacred chiefs.

In the Government of the country the power of the chiefs predominated, but was effectively controlled by the heads of families, and especially by the *tulafales*, or orators. There was no general Government for the whole Group. Regular meetings were held by

each village, at which all purely local affairs were decided. In addition to these there were meetings held by a number of such villages forming a section of the district, and others again where the whole of the district united to formulate laws, or to decide as to their action upon any matter, political or otherwise, which might be brought under their consideration. This decision was, however, never held to be binding by any village or section which might be opposed to the decision of the majority. The chiefs had great power, but were always afraid to exercise it if opposed by any number of influential orators, even in their own towns. The idea of a king and government exercising administrative power over the whole of Samoa is one of modern origin. The principal districts on Upolu and Savaii, the two largest islands, were Atua, Tuamasauga, Aana, Manona, Safotulafai, Saleaula (*le itu o tane*), Satupaitea and Palauli (*le itu o fafine*).



THE SAMOAN KING, MALIETOA.

The history of the Samoan Group has been a troublous one. About the time of the introduction of Christianity, Manono was the ruling power. Her influence, however, was somewhat weakened by the war which followed the murder of Tamafainga, the *Aitu*, or spirit chief. It was also weakened by the war of 1847-50, but she still claimed the title of the *Malo*. About twenty years ago, the district of Tuamasanga, in which the port of Apia is situated, formulated a system of laws which were to be on the model of English laws. Some of the laws were offensive to the natives from other districts, who had always looked upon the Tuamasanga as a conquered people, but the great insult was a fort and a flag-staff erected near Apia, which were understood by the other natives as an assumption of superiority. Wars ensued, and since that there have been only short periods of settled peace.

The Steinberger rule lasted from 1874 to 1876. In that year, Mr. G. W. Griffin was appointed as United States Consul to Samoa, and it was principally owing to the energetic manner in which he discharged the duties of his office that the "Taimua and Faipuli" Government sent the chief, Le Mamea, as ambassador to the United States Government. A draft treaty was signed towards the close of 1877, and formally read and exchanged on the 3rd of July, 1878. This treaty had afterwards a most important effect on Samoan affairs, as it no doubt influenced very materially the subsequent action of the American Government, and their very friendly relations with the Samoan people. By the provisions of this treaty, the fine harbour of Pago Pago (Pango Pango) was ceded to the United States, and the Government of that country agreed to recognize the independence of Samoa, and to exercise its good offices for the settlement of any dispute that might arise between Samoa and any other country in amity with the United States. After this, the position and strength of the contending parties changed again and again, the districts were split up and divided, and no stable government was

formed. Malietoa was for some time acknowledged as king, with Tamasese as vice-king, but in 1887 Malietoa was forcibly deposed by the Germans and taken away as a prisoner to the Cameroons, and afterwards to Germany. Tamasese was supported by Germany as king, but did not succeed in establishing a strong government, and in 1888 Mataafa, a high chief of Atua, joined with those who formed the Malietoa party, and was formally recognized as king in opposition to Tamasese. During the hostilities which followed, a large armed party from the German ships of war, which was landed near Vailele to support the Tamasese party, came into collision with the Mataafa men, and a severe engagement took place. The Germans were greatly out-numbered, but fought their way to Vailele Station, and held it until relieved by their gun-boats, which shelled the native villages. Two German officers and thirty-eight of the men were killed in this affair.

On Saturday, the 16th of March, 1889, a most disastrous hurricane was experienced in Samoa. The force of the cyclone was not unusually great, but, owing to the unsettled state of the country, there was the unusually large number of seven war-ships in the port of Apia, which is notoriously unsafe during the hurricane months. For some unexplained reason the warnings of the barometer, which fell below twenty-nine degrees, were unheeded, and none of the ships left the port for the open sea. The sad consequence was that the German war-ships *Eber*, *Adler* and *Olga*, and the American ships *Trenton* (Admiral Kimberley), *Vandalia* and *Nipsic* were all driven on shore, and about one hundred and fifty officers and men drowned in the heavy surf within a stone's throw of the land. The British war-ship *Calliope* steamed out to sea against the full force of the wind and sea, a feat which bore good testimony to the courage and skill of Captain Kane and his officers and crew, and to the great steam-power and weatherly qualities of the ship. As the *Calliope* was slowly forcing her way seaward, she very narrowly escaped a collision with the American Admiral's ship *Trenton*, which would probably have been fatal to both ships. The officers and crew of the *Trenton* cheered most heartily as the *Calliope* passed, in admiration of the splendid manner in which the ship was handled, and to encourage the brave men in their fierce struggle with wind and sea. This spontaneous compliment was highly appreciated by Captain Kane and his crew, and affords another instance of the kindly feeling with which men, who are themselves brave, regard acts of bravery and determination in others. One of the most interesting incidents in the events of that memorable day was the noble conduct of the Samoans. About five hundred of them, under the leadership of their chiefs, rendered great service in saving life, and though they were then at war with the Germans, they made no distinction whatever as regards nationality, but were as ready to rescue their drowning foes as they were to succour the Americans, to whose friendship they were so much indebted. The unsatisfactory state of the Group still continuing, a conference was held at Berlin between the three Great Powers interested, and a Treaty was formally signed on the 28th of June, 1889, under which the Government is at present carried on. This Treaty declares the Samoan Islands neutral territory, where the subjects of the three Signatory Powers (Great Britain, the United States and Germany) have equal rights; it recognizes the independence of the Samoan Government and the free rights of the natives to choose their own king or chief, according to their own laws and

customs. Neither of the Powers shall exercise separate control over the Islands or the Government thereof. King Malietoa (who had been brought back from exile by Germany) is to be recognized as king, and his successors, who may be duly elected according to



A SAMOAN PRINCESS.

Samoan custom. Provision is made for constituting a Supreme Court, and the appointing of a Chief Justice, whose salary is to be paid by the Signatory Powers for the first

year. The alienation of land by sale or mortgage is prohibited. All land claims by aliens are to be settled by a commission of three persons, one to be named by each of the Signatory Powers. These commissioners are to be assisted by an officer called the Natives' Advocate. The Port of Apia is to be constituted a municipal district, import duties and taxes are to be levied, and the apportionment of the revenue is defined. The sale of fire-arms and ammunition to natives is prohibited, and also the selling or giving of any intoxicating drink to them, or to any South Sea Islander. Under the treaty, M. Conrad de Cederkrantz was selected by the King of Sweden and Norway as Chief Justice, and was duly appointed by the Signatory Powers. He arrived in the Group in December, 1890, and was heartily welcomed by both whites and natives.

Apia has for many years been the centre of German trading operations in the Pacific; as it is for all practical purposes the capital of Samoa. Although a fairly large commercial interest has its centre in this flourishing Group, the record of its transactions has never been kept, and no accurate statistics can be obtained as to the exports and imports. The principal article of export here, as in most of the islands of the South Seas, is copra, of which large quantities are produced in the Group, in addition to that which is collected from adjacent and distant islands. The population of the entire Group is about thirty-five thousand, including about three hundred foreign residents.

TONGA, OR THE FRIENDLY ISLANDS.

THIS Archipelago is situated between fifteen degrees and twenty-three degrees thirty minutes south latitude, and one hundred and seventy-three degrees to one hundred and seventy-seven degrees west longitude, these being the boundaries fixed by proclamation. It consists of three well-defined divisions, trending from north to south, which are generally known as the Tonga, the Haabai and the Vavau Islands, and the Nuias and Pylstaart Islands. Tongatabu, or Sacred Tonga, the largest island, is the present seat of Government, and gives its name to the Group. The next island of importance in the southern division is Eua, a fine island, which rises to the height of one thousand two hundred feet; and has the only running streams which are to be found on these islands. There are also several other islands in this division, known as Eueiki, Atata, Bagaimotu, and a number of small islets. Haabai, the middle group, is separated from the nearest island in Tonga by about forty miles of open sea. Tofua (active volcano), Kao (active volcano in this generation, but now quiescent), Lifuka, Haano, Foa, Lofanga, Moungone, Uiha, Fonoifua, Uoleva, Nomuka, Haafeva, Tugua and Fotuhaa are the principal islands in this division. Between Tonga and Haabai are two remarkable islands, called Huga Tonga and Huga Haabai, which from their height and prominent position are always mentioned by the early navigators. Between Haabai and the northern division there is another active volcanic island called Late. The northern group, called by the natives Haafuluhao, is generally known by the name of its chief island, Vavau. It comprises also Falevai, Bagaimotu, Huga, Niuababu, and a number of small islets. Farther to the north-east are the islands of Fonua-lei, Niua Tobutabu and Niua Foou, all of which are comprised in the kingdom of Tonga. The Group was first discovered by Tasman in 1643. He sighted Eua, which Island he called Middleburgh, and Tongatabu,

which he named Amsterdam. He visited also the Haabai Group in the same year. Captain Cook, however, was the first to give a detailed account of the islands. He first visited them in October 1773, then in June 1774, and again in 1777, when he remained about three months. The natives have no traditionary account of Tasman, but Captain Cook's name is well known, and some relics of his expedition were long preserved by the people. Between 1777 and 1791, the Group was visited by the *Princess*, a Spanish frigate, and by the *Pandora*, the *Bounty* and the *Providence*, all British ships. In 1792, Rear-Admiral d'Entrecasteaux called there with two French war-ships,



NUKUALOFA, THE CAPITAL OF TONGA.

the *Recherche* and the *Espérance*. These visitors had frequent quarrels with the natives, when several of the French were wounded and some of the Tongans were killed. The history of the succeeding years, previous to the establishment of the Mission, is that of the numerous outrages committed by these so-called Friendly Islanders upon some of the many visitors to the Group. The most prominent cases are those given by Captain Dillon, in his narrative of the discovery of the fate of La Pérouse. Writing in 1827, he mentions an attack on the *Supply* whaler, about 1822; the capture of the American ship *Duke of Portland*, and the massacre of all on board with the exception of one woman (English) and three boys; the murder of Captain Pembleton and Mr. Boston, the commander and supercargo of the American ship *Union*; the capture of the *Port-au-Prince* and the massacre of most of the crew, in 1806; and the fate of two whalers at Vavau. To these may be added an affray in 1888 between the natives and the *Dumont d'Urville*.

The islands are very fertile, the soil being composed of rich black mould, consisting chiefly of decomposed vegetable matter. The principal productions are yams, cocoa-nuts, bananas, and sweet-potatoes. *Taro* requires wet land, and so but little can be grown in Tonga. Arrowroot, cassava, turmeric, wild ginger, and other tropical plants are plentiful, but are not much used by the natives. Coffee grows well, and is of very fine flavour. The bread-fruit, *papaw* apple, Malay apple, custard apple, pine-apple, guava and mango can be grown in large quantities. Oranges and bananas are very fine and are largely exported. Horses, cattle and sheep have been introduced, and thrive well.

The political Constitution of Tonga in the olden days was that of a monarchical

despotism, supported by an hereditary aristocracy. The different grades were the *Hau* or families of the blood royal; the *Houeiki*, or chiefs; the *Muas*, or gentry; the *Matabules*, or official attendants; and the *Tuas*, or common people. Professional employments such as carpenters, fishermen, undertakers, doctors, etc., were strictly hereditary. Rank was hereditary, and women sometimes held the reigns of Government in their own right. The succession to the regal power was regulated by certain well-known laws, and did not necessarily pass to the eldest or indeed to any son, the brother of the deceased being generally considered as having the prior claim. The present king, George Tubou, is one of the most remarkable men in the South Seas. He was first called *Taufaahau*, and was originally the king of the Haabai Group only. In 1833, he was nominated by Zephaniah Finau Ulukalala (the *Finow Fiji* of Mariner) when dying, as his successor, and on the death of that ruler he was elected by the chiefs as king of Haafuluhao (Vavau). He thus held the sovereignty over the two groups of Haabai and Vavau. At this time, his father's uncle, Josiah Tubou (*Alea-motua*), was king of Tonga, and on his death, in 1845, he also declared that King George of Haabai and Vavau should succeed him, he being the rightful heir of Tuboutoa, the preceding king. To this the chiefs agreed, and King George was unanimously chosen as *Tuikanokubolu* and king of the whole Group. The inaugural ceremony took place at Bagai in Hihifo, on the 4th of December, 1845. He is now (1891) about ninety-three years of age. The supreme power was formerly held by the *Tui Tonga*, who was, as the name implies, the king of the whole group, and was also supposed to exercise divine rights and privileges. The title and position are, however, now abolished. The present Assistant-Premier, Mr. Basil H. Thomson, and Mr. Alexander M. Campbell, Collector of Customs and Postmaster-General, are the only European Members of the Government.

The customs of the Tongan people differed but little from those of the other Eastern Polynesian peoples, except, perhaps, in the land tenure, and the high position accorded to women. All lands were supposed to be the property of the king. The great chiefs held them by hereditary right, but subject in all cases to the will of the king, to whom they rendered military assistance. The people, through these chiefs, had also to pay tribute. Servile homage was paid to all superiors, particularly to those of very high rank. The etiquette to be observed when meeting a chief, or coming into his presence, was very clearly understood, and any breach of it was at once visited with very summary punishment. No common man would dare to sit in a more elevated place than the chief, or to come into his presence with a wreath round his head, or with his hair wet, or even to remove anything from above where the chief was sitting. A commoner was expected to sit down at the road-side, and, if carrying a burden, to lower it from his shoulders, and make a detour from the path whilst the chief was passing. Many of the words and salutations used in addressing chiefs were peculiar, and could not be used to a commoner. The deliberative assemblies of the chiefs were conducted with great ceremony, and according to the strict rules of procedure and etiquette. Their weapons were simple, and consisted only of spears, javelins, clubs, bows and arrows, and slings. They constructed strong and well-arranged fortifications, consisting of powerful stockades defended by earth-works, and in besieging such places they well understood the method of approaching by trenches and pits. It was in attacking a

fortification of this kind at Bea, that Captain Croker, of *H.B.M.S. Favourite*, was killed in 1840. All prisoners taken in war became the *bobulas*, or slaves, of the conquerors, and were often treated with great cruelty. In times of peace the men were employed in fishing, agriculture, house-building, and especially in voyaging. They were bold and daring sailors, and in their large double-canoes often made voyages to Samoa, Fiji and other places. Women in the Friendly Islands occupied a very exceptional position; they did no field-work, and never even cooked the food of the family. Their chief work was to make native cloth (the *tappa* of Polynesia), baskets, bags, fans, etc. The Tongans were very fond of dances, boxing and wrestling matches, and canoe races, and these filled up most of their spare time. Many barbarous customs were observed on the death of any great chief. The hair was cut off, old and torn mats were worn, cuts, bruises and burns were inflicted, and the amount of respect or affection for the deceased was shown by the pain and injury which was self-imposed. Polygamy was common, the number of a man's wives depending only upon his inclination and his ability to keep them. The aged people were well cared for, and no cases of burying the old and infirm alive, such as were common in Fiji, were ever known in Tonga. Cannibalism no doubt existed in former days, as described by Mariner in his valuable and interesting book, but it was never practised in Tonga to the same extent as in other places.

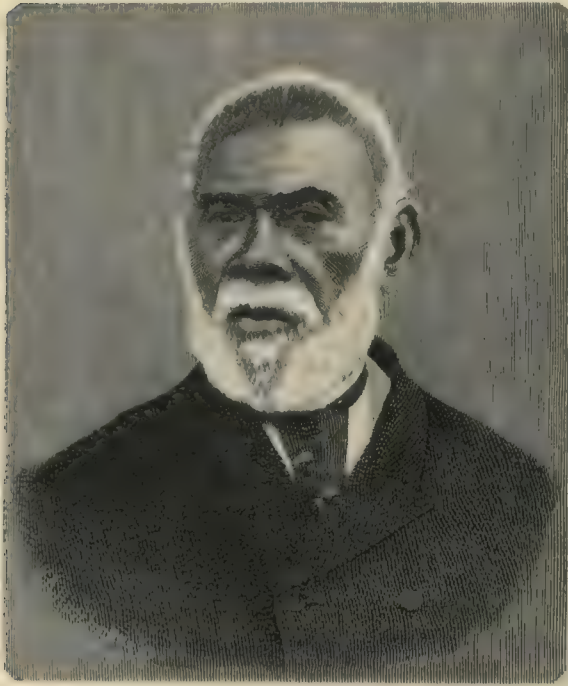


THE STONE ARCH, NIUTOUA, TONGA.

The religion of the Tongans was similar to that of most of the Eastern Polynesian races. The principal gods were *Maui*, *Hikuleo*, *Tangaloa* and *Hemoana-uliuli*. *Maui* is said to have drawn up the Islands with a hook and line, and those which he did not tread down and make smooth are still mountainous and rugged. We find in Tonga the same legends about *Kijikiji* as in other groups. He it was who first obtained fire from below, and, in order to preserve it, caused it to enter into certain trees, from which it may be obtained by friction. *Maui* it is who resides under the earth and bears it upon his shoulder. When he nods there is an earthquake, and so the natives used to stamp and shout to awaken him, lest in his troubled dream he should upset the island altogether. *Hikuleo* is the god of spirits, and resides at *Bulotu*. The spirits of chiefs and men of rank go there and do his will, but where the spirits of the common people go is not certain. Sacrifices were offered to *Hikuleo* when any sacrilege was committed, and the spirits of chiefs were regarded as intercessors with the gods, and prayers were made to them. *Tangaloa* was the Tongan Jupiter, who sent forth thunder and lightning; *Hemoana-uliuli* governed the sea. In *Bulotu* was to be found

the "Water of Life," and also the "Speaking Tree," which received all the commands of the gods. The human soul existed after death, and possessed the same attributes as the minor gods, but in a lesser degree. All evil was attributed to the malice of mischievous gods. Circumcision was practised, the rite being performed at about fourteen years of age. First-fruits were given with great ceremony to the sacred king, the *Tui Tonga*, as is so well described by Captain Cook. Everyone and everything that touched a dead

body was regarded as unclean for a certain number of days or weeks. Many animals were regarded as the shrines of certain deities, and the native who worshipped those gods never ate those particular animals.



KING GEORGE OF TONGA.

Near a village called Niutoua, in the east end of Tonga, are three large and peculiar stones. These stones are called by the natives *Koe Haamoga o Maui*,—"the burden of *Maui*." They are made of coralline limestone, and have evidently been cut out of the solid reef, and transported to the place where they now stand. The two large perpendicular stones are fourteen feet high above the ground, twelve feet wide at the bottom, and nearly five feet thick. The large stone on the top is mortised into the perpendicular columns, and is not simply laid upon the top as in most trilithons. This

top stone is sixteen feet in length, four feet eight inches wide, and about two feet thick. No satisfactory explanation can be obtained from the natives as to the use or meaning of these stones. They simply ascribe their position to supernatural agency. It is very difficult to understand how such huge stones could be quarried and transported so far inland as they now stand, by a people with so few mechanical appliances as the Tongans of late years possessed. The two most probable theories as to their use appears to be that they either formed a gate-way into the old burial-place of the sacred kings, the *Tui Tongas*, or that they were erected as a monument to some one of them in early times. Near to Mua are also some old burial-places of the *Tui Tongas*, which are very interesting relics of the olden days. These are built in three terraces, on the top of which the grave was placed. The lower terrace in one of these burial-places is one hundred and twenty-six feet in length, and ninety-three feet in width. One of the stones built into this terrace measures fourteen feet in length, and two feet in thickness. It stands three feet above the ground. A large corner stone in this lower wall is worked fourteen feet on one face, six feet on the other face, and is two feet in thickness. Another of these burial-places is about one hundred and seventy feet square, and has one large stone in the lower terrace twenty-five feet six inches long, and two feet in thickness, and is seven feet six inches high from the lowest ground level.

The great advance which Tonga has made of late years is due in no small measure to the influence of the missionaries upon the people. The first attempt to introduce

Christianity into the Group was made in the year 1790, about twenty years after Captain Cook's last visit. Ten missionaries and mechanics were landed from the London Missionary Society's ship *Duff* in that year. In April, 1799, the *Tuikanokubolu* was murdered, and war ensued, in which three of the missionaries—Messrs. Harper, Powell and Gaulton—and an Englishman who lived with them were killed. The survivors, with one exception, were removed to Sydney in the year 1800. The Rev. Walter Lawry, of the Wesleyan Missionary Society, arrived at Tongatabu in August, 1822, but was obliged to leave on account of domestic circumstances at the end of 1823. The Rev. John Thomas and John Hutchinson, of the same Society, landed in Tonga in June, 1826. The Rev. Nathaniel Turner, the Rev. W. Cross and Mr. Weiss, also of the Wesleyan Missionary Society, arrived at Nukualofa in 1827, and found two Tahitan teachers employed in that locality. The Catholic missionaries have also been labouring in the Group since 1842. The Tongans have for many years been a professing Christian people. They have a comparatively large literature supplied by the missionaries. The educational work is now under the direct charge of the Government, and all children and young people are compelled to attend school. The Government and the Wesleyan Mission have each a training college for the higher education of their agents. In the year 1873, the King granted to the people a Constitution which is based on that of Great Britain. This Constitution abrogates the arbitrary power of the chiefs, gives equal rights to all, and secures freedom of worship and liberty of conscience to all His Majesty's subjects. Treaties have been entered into with Great Britain, Germany, and the United States, and coaling stations have been granted to these Powers in the fine harbour of Vavau, which lies almost in the direct line of traffic between Australia and America.

The people may be classed as Eastern Polynesians, and belong to the same race as the Maoris, Samoans, and other kindred people. The present population of the Group is about twenty-two thousand. Nukualofa is the capital and seat of Government. The total number of foreign residents in the Group is about four hundred and thirty. The principal buildings in Nukualofa are the King's Palace, the Chapel Royal, the Government Offices, and the Wesleyan, Free Church and Catholic Churches. There is a good wharf built by the Government, at which steamers and vessels may be safely berthed whilst discharging and loading cargo. The North German Lloyd's fine steamer *Lubeck* calls at Nukualofa every month. Messrs. Donald and Edinborough's steamer *Richmond* runs regularly from Auckland to Tahiti, and makes Tonga the first and last port of call. The Union Company's steamer *Wainui* also runs every month to Tonga, Haabai and Vavau, connecting with the Company's boats at New Zealand for Australia.



THE MISSION CHURCH AT NUKUALOFA.

During the year 1887 the total value of the import and export trade of Tonga to and from other countries was five hundred and three thousand and four dollars. The principal foreign importers and exporters, according to nationality, were British and German, the former being represented by a sum of one hundred and forty-one thousand six hundred and eighty-four dollars, and the latter by three hundred and forty-three thousand and twenty-seven dollars. France was the next highest, with a value of one thousand eight hundred and sixty-five dollars. The total customs revenue for the year was twenty thousand seven hundred and seventy-four dollars. The total value of the exports for the same year was two hundred and fifty-three thousand four hundred and thirty-one dollars. This amount was made up as follows: produce of Tonga, one hundred and fifty-seven thousand four hundred and forty-nine dollars; produce imported for exportation, ninety thousand nine hundred and ninety-three dollars; and general exports—manufactures of other countries—four thousand nine hundred and eighty-nine dollars. The principal exports, the produce of Tonga, were: copra, two thousand six hundred and forty-nine tons; wool, thirty thousand pounds; *kava*, nineteen thousand one hundred and forty pounds; cotton, eleven thousand seven hundred and ninety pounds; fruit (green), three hundred and ninety-five cases; bananas, eight thousand one hundred and four bunches; oranges, four hundred and three thousand; fungus, eleven thousand and forty-nine pounds; and forty-one horses.

The climate of Tonga is very cool and pleasant during the winter months; and there is little doubt that as the Group becomes better known it will be a favourite resort for invalids and others who may wish to escape from the cold or damp climate of the colonies during the currency of the winter season.

During the past few years some great changes have been made in the Government of Tonga, and affairs are entirely altered. Up to July, 1890, the Hon. S. W. Baker was Premier, and also united in his own person most of the important offices of the Government, and thus possessed what was practically unlimited power. Many complaints were made from time to time against Mr. Baker for the alleged arbitrary use which he made of the great influence which he possessed over the mind of the King. He was accused of being primarily responsible for the persecutions which were inflicted upon those Tongans who remained faithful to the Wesleyan Church; for the banishment of many others to Fiji and Tofua for the same reason; for violating the Constitution which provides liberty of conscience and freedom of worship; and for many other actions which were oppressive to the chiefs and people of Tonga. These complaints were previously examined and reported upon by Sir Charles B. Mitchell, previous High Commissioner for the Western Pacific, assisted by the Chief Judicial Commissioner. Evidence was then given, which, in the opinion of the High Commissioner, would have justified him in prohibiting Mr. Baker, as a British subject, from residing within certain prescribed limits, as being dangerous to peace and good order therein. This power, however, the High Commissioner declined to exercise, having received from the King a letter containing certain promises and propositions which he deemed to be satisfactory.

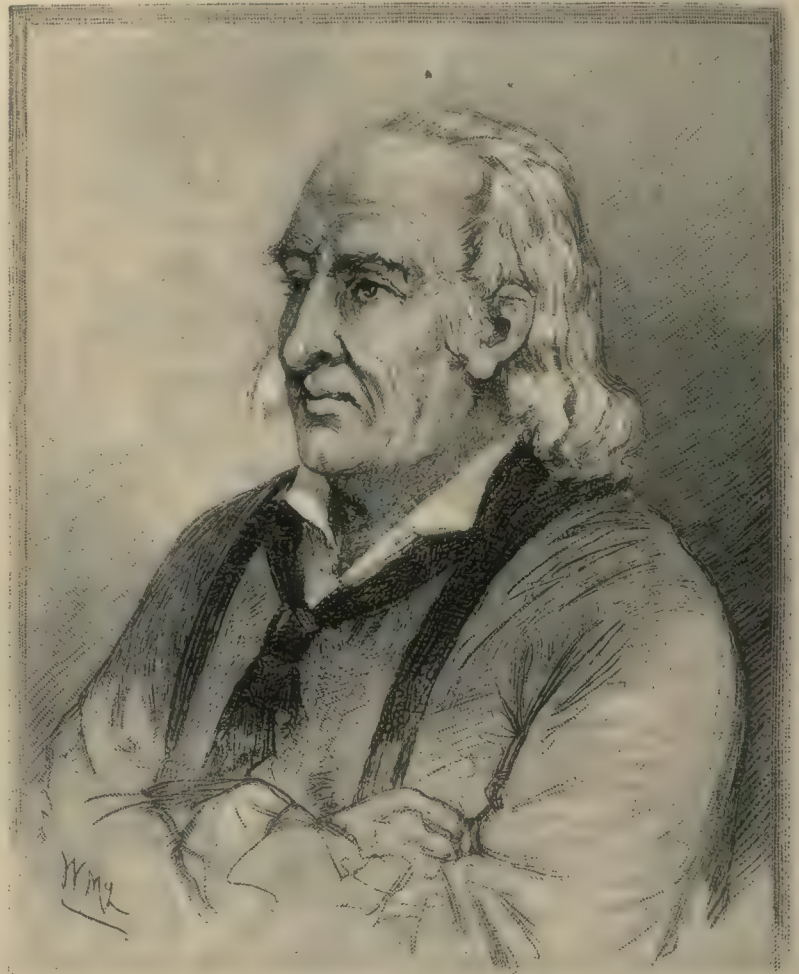
On the visit of his Excellency, Sir J. B. Thurston, the High Commissioner for the Western Pacific, to Tonga in June, 1890, these and many other complaints were formally brought before him by some of the highest chiefs, including members of the

King's own family, and by people of all classes. They made affidavits to the effect that Mr. Baker had ruined Tonga, that disturbances had been caused by his actions, that more would certainly follow, and that Mr. Baker's life was in danger as long as he remained in the Group. After consideration and enquiry, the High Commissioner first notified Mr. Baker on the 5th of July of his intention, and on the 17th of July he issued an order prohibiting him from residing in the Group for the space of two years, as being a person dangerous to the peace and good order of the Western Pacific. This action has since been approved of by the British Government. On receipt of the order, Mr. Baker left Tonga for Auckland. The King had dismissed him from all offices, and appointed the Hon. George Tukuaho as Premier. His Majesty also, at the request of the High Commissioner, formally proclaimed complete freedom of worship in accordance with the Constitution of Tonga, the release of all who were imprisoned without proper cause, and the return of all those who were exiled to Fiji and Tofua. His Excellency the High Commissioner, at the request of the King, directed Mr. Basil H. Thomson to assist the Government for a limited period in carrying out some necessary reforms. The Government was found to be heavily indebted to officials for salaries over-due, and to other creditors, but these liabilities, with the exception of some of the salaries due, were all met before the end of the year. Taxation is decreased, many of the oppressive laws are being modified or entirely repealed, and peace and harmony are again restored to this beautiful and interesting Group.

LORD HOWE AND NORFOLK ISLANDS.

THE well-known history of the "Mutiny of the *Bounty*" is one of the romantic episodes of South Sea Island story. It was from that remarkable event that the colonization of Pitcairn Island dated, and its connection with Norfolk Island is derived from the fact that the descendants of the old mutineers, who had first settled on the former Island, were removed thither in June, 1856. Some of them returned again to their original settlement in 1859, and these were followed by another party in 1864, so that the relationship between the two Islands has been in some measure maintained. The story of the mutiny has been often told. Captain William Bligh, afterwards Governor of New South Wales, was dispatched in the *Bounty*, in 1787, on a mission to introduce the bread-fruit tree from Otaheite to the British West India possessions. Until the ship's arrival at Otaheite, the voyage had passed unmarked by any remarkable incidents, although Bligh had succeeded in making himself unpopular with his officers and men by his severe measures of discipline. The *Bounty* left Otaheite on the 7th of April, 1789, with a supply of bread-fruit trees on board, and on the 28th of the same month the vessel was piratically seized by the crew while in the neighbourhood of Tofoa, one of the Friendly Islands. Just before sunrise Bligh was awakened by a party of sailors under the command of Acting-Lieutenant Christian, who rushed into the cabin and placed him under arrest. He was bound, and a guard placed at the doors of the officers who remained faithful to him. They were then brought on deck, the launch was hoisted out, and Bligh and his party were ordered into the boat. They were allowed to take twine, lines, sails, cordage, and a twenty-eight gallon cask of water, with one hundred and fifty pounds of bread, and a small

quantity of rum and wine. A quadrant and a compass were given them, but no other instruments, according to Bligh's account; while it is alleged, on behalf of the mutineers, that Christian handed into the long-boat a sextant and a book of nautical tables. The launch was veered astern by a rope, and, "after having undergone a great deal of ridicule, and been kept for some time to make sport for the unfeeling wretches," says Bligh, the adventurers were cast adrift. Bligh and his eighteen companions voyaged three thousand five hundred miles in their brave craft, landing at Timor, where they were found later on by *H.M.S. Pandora*. Different causes have been assigned for this extraordinary mutiny; Bligh ascribing it to the allurements of savage life at Otaheite, while the mutineers, through their leader, Christian, gave as their reason the continuous ill treatment to which they had been subjected on the voyage. Christian took command of the *Bounty*, and steered for the island of Toubouai, lying in twenty degrees thirteen minutes south latitude, and one hundred and forty-nine degrees thirty-five minutes west longitude. Before landing he revisited Otaheite and procured some live stock, and returning to Toubouai, made a settlement



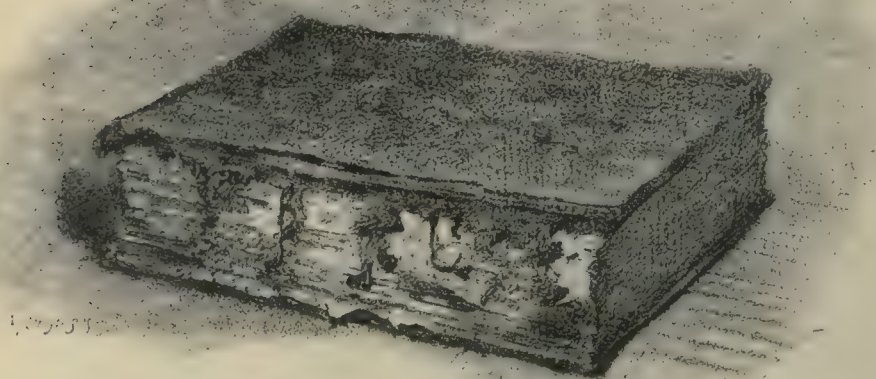
JOHN ADAMS.

there. Quarrels with the natives soon made it desirable to seek another place of refuge. Returning to Otaheite, sixteen of the mutineers elected to go ashore, while Christian and eight others, with twenty Otaheitan natives, men and women, took leave of their friends and sailed away. Those who remained were discovered, in 1791, by the *Pandora*, taken to England, and there tried by court-martial, three being hanged at the yard-arm of a vessel in His Majesty's fleet in Portsmouth Harbour for their share in the memorable mutiny. The *Bounty* left Otaheite for the last time on the 23rd of September, 1789. There was a book on board telling how Captain Carteret, in the sloop *Swallow*, had sighted a small island in latitude twenty-five degrees four minutes south, and longitude one hundred and thirty degrees twenty-four minutes west, about one thousand two hundred miles south-east of Otaheite. Carteret named the island after a midshipman named Pitcairn, who sighted the spot on the horizon, from the mast-head, on the 2nd of July, 1767. Towards this island Christian determined to steer. The search occupied several weeks, owing to an error in Carteret's record; but in October, 1789, this speck in the vast Pacific was descried, and the mutineers once more disembarked. They burnt their



A TONGAN BELLE.

ship and sunk her guns, so that no trace might remain, and Pitcairn Island was colonized. Christian divided the hitherto uninhabited island into nine parts, which he apportioned among the Europeans present. For some time the settlement went on peaceably, until one of the mutineers, named Williams, whose wife had been killed by a fall from a cliff, attempted to possess himself of the wife of an Otaheitan. His comrades protested against this step, but Williams threatened to leave the Island if they interfered, and as he was a skillful workman, having been armourer to the ship, they soon gave up their opposition. Thereupon the Otaheitans formed a plot, which is said to have resulted in the murder of Christian and Williams, and three of their companions. They then proceeded to quarrel among themselves, so that in a short time all the males were killed, leaving Pitcairn in the undisputed possession of four of the mutineers and the Otaheitan women. One of the former succeeded in distilling a spirit from the ti-tree, which grew on the Island. He lapsed into a continual state of inebriety, and presently fell over a cliff and was killed. A companion who had taken to the same evil courses was destroyed by the two survivors, Young and Adams, in 1799. Young had been a midshipman on the *Bounty*, and Adams an able seaman, who had taught himself to read and write from printed papers picked up in the streets of London, in which city his father had been a lighter-man. Among the disused articles taken from the old ship were a Bible, and a prayer-book of the English Church. Adams applied himself to the reading of these, and under the influence of his studies, it is said, he soon began to see visions and to dream dreams. He collected the children of the Island, to the number of nineteen, and proceeded to teach them the



THE PRAYER-BOOK USED BY JOHN ADAMS.

Christian truths. He taught the community to read, the Bible being the lesson-book; and under the new influence thus introduced, life on the Island underwent a radical change. Public worship was established, after the form of the English Church; the Sunday was observed; the tone of morals was raised, and order and some sem-

blance of social law made their appearance in the little community, so that when the Island was once more brought into touch with the outer world by the successive visits of the *Topaz*, the *Britain* and the *Tagus*, in 1808 and 1814, it was found that the survivors of the old mutineers had succeeded in establishing a community as idyllic and virtuous as any in the Arcadian age. Mr. Young died in 1800, and from that time Adams became the patriarch and ruler of the settlement.

After the dates named, vessels touched repeatedly at Pitcairn Island, and the outer world learnt with interest of the singular experiment of which it had been the scene.



OFF THE COAST OF PITCAIRN ISLAND.

In 1825, the *Blossom*, a vessel fitted out for purposes of discovery, visited the Island; and from Captain Beechy, R.N., we get an account of the Islanders and their condition. Adams and ten of his people put off in a boat to board the *Blossom*. The old mutineer was then in his sixtieth year. His old habits of discipline were still so strong that he held a low-crowned hat in his hand, until desired to put it on; he wore a sailor's shirt and trousers; and he doffed his hat and smoothed his hair, after the manner of His Majesty's sailors of nearly half a century before, whenever the officers of the King's ship addressed him. The young men who accompanied him, we are told, were tall and healthy, with good-natured countenances, and an engaging simplicity of manner. Their dresses were whimsical enough; some had long coats without trousers, others had trousers without coats, and others, again, waistcoats without either. None of them had shoes or stockings, and there were only two hats among them—"neither of which," says Captain Beechy, "seemed likely to hang long together." The *Blossom* stayed at Pitcairn three weeks, observing the manners of the Islanders. The village consisted of five houses, in which the people lived in the utmost simplicity, employing themselves in work and devotion, and subsisting on temperate and wholesome fare. Three years after Captain Beechy left, Mr. George Hunn Nobbs settled there. He had been a lieutenant in the Chilian Navy, and after a career of adventure he settled down at Pitcairn to quiet life and work. He went thither from Callao, a voyage of three thousand five hundred miles, in an eighteen-ton launch. He married a grand-daughter of Fletcher Christian, and later on became the ordained chaplain of the Island. He succeeded to the patriarchate of the little colony on the demise of John Adams, who died on the 29th of March, 1829, in his sixty-fifth year, leaving his name on the Island as a tradition to be treasured with respect and honour. Vessels continued to visit Pitcairn, and in 1830, *H.M.S. Seringapatam* brought the inhabitants presents of clothing and agricultural implements from the British Government. In 1831, the Government deported all the Pitcairn Islanders to Otaheité in H.M. sloop *Comet*. Here twelve of their number died, and five others died at Pitcairn, whither the party returned within seven months of their departure. In 1833, a person named Joshua Hill arrived at the Island. He was seventy years of age, and claimed to have been sent out to take charge of the little colony. This ancient adventurer soon introduced disorganization and disorder among the quiet Islanders, some of whom he suspended by the hand in the church, flogged, and otherwise maltreated. Complaints were made to the naval officers serving on the Pacific station, and presently Joshua Hill, who falsely claimed to be a near relative of the Earl of Bedford, was secured by *H.M.S. Imogene* and carried off to Valparaiso, in 1837. Mr. Nobbs, who had been driven away from Pitcairn by this "partially-deranged impostor," returned to his charge, and the quiet and simple life of the Island was resumed. From this time their career remained undisturbed for many years. A kind of self-government was established, one of the inhabitants being elected Chief Magistrate, with two Councillors. The increasing population, however, overtaxed the sustaining capacity of the Island, and in 1852-3 the dry season and failing crop reduced the inhabitants to the verge of privation. After much persuasion they were induced to emigrate to Norfolk Island, in the *Morayshire*, on the 22nd of April, 1856, about sixty-seven years after the memorable mutiny. The Pitcairn Islanders then numbered nearly two hundred

souls. Some returned in 1858 and 1863, and the descendants of the old mutineers of the last century now occupy both Pitcairn and Norfolk Islands, in much peace and simplicity.

Norfolk Island lies in latitude twenty-nine degrees fifty seconds south, and longitude one hundred and sixty-seven degrees fifty-seven minutes east, and was discovered by Captain Cook in 1773. It is about twenty miles in circumference, with an average breadth of five or six, and is elevated one thousand and thirty-nine feet above the sea-level. The Island has had a dismal history. Chosen, at an early period in the mother-colony's history, as a place of confinement for desperate felons, it was there, as in a conservatory of crime, that the iniquitous penal system of the early days brought its



LANDING THROUGH THE SURF AT NORFOLK ISLAND.

flowerage and ultimate fruit to the rankest extreme of development. The first colonizing party reached there under Lieutenant King, in March, 1788, and in 1790 that official was relieved by Lieutenant-Governor Ross, until his return in the following year. In 1805 the Island was abandoned, the inhabitants removing to Van Diemen's Land; but in 1826 it was again constituted a convict settlement. From this time, until the penal system was finally broken up, the story of Norfolk Island forms the darkest chapter in Australasian history. Its aspect now differs strangely from that presented by the Island while a penal settlement. The old prison buildings still stand, and easily strike the visitor's eye on landing, but otherwise all is changed.

Leaving the settlement of Kingston on the left, after following a road winding up among the hills for about a mile and a half, the pedestrian finds himself at the beginning of a magnificent avenue of pine trees, straight as an arrow and about a mile

and a half in length. Walking along this green colonnade, pleasant glimpses of the sea, between the green downs on the left, are obtained; on the right, Mount Pitt, thickly wooded to the summit, forms an attractive picture. At length a dip in the road brings one to the Mission. On the left is a small green, on which stand the houses and buildings occupied by the women and married natives; on the right is the eastern end of the Pattison Memorial Chapel. Behind this are the school-rooms and missionaries' houses, and the principal buildings connected with the Mission. All about, as every-where



KINGSTON, NORFOLK ISLAND.

throughout the Island, stand straight, tall, feathery pines. Here, under the direction of Bishop Selwyn, young natives from the Islands, male and female, are trained up as teachers. As, of course, they have many different dialects, Motu is taught all in the first place. They are a happy lot of people, and many show great intelligence, especially in picking up music, several playing the organ and harmonium with more than average facility. The men are dressed in flannel shirts and blue trousers, their hair being

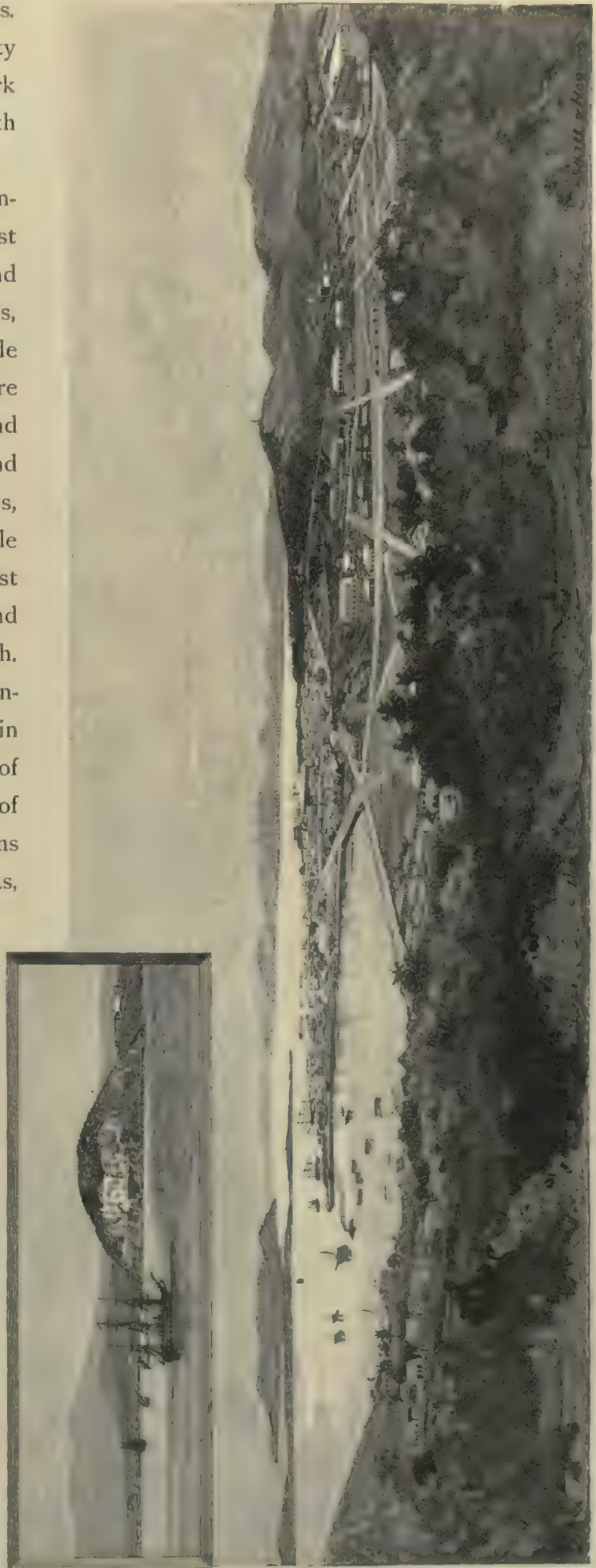
combed out in the prevailing island fashion, and decorated with flowers and feathers. Small sticks of bamboo, covered with native patterns, are usually worn stuck through the lobe of the ear. The women wear white or red dresses, and adorn their heads in much the same way as the men. The show-place of the establishment is, of course, the chapel, and a very handsome one it is. On entering, the first object that strikes the eye is a massive font of black and red Devonshire marble. The pavement is of the same material, black and gray, in oblongs arranged diagonally, and of a wonderful polish, the bare feet of the worshippers precluding any scratching. The rows of pews, three on each side, are of light-wood, and have small panels at the end, which have recently been inlaid with mother-of-pearl, tortoise-shell and ivory mosaic work, in very handsome patterns. The hangings on either side of the altar were embroidered by the widow of the late Commodore Goodenough. The reredos is of carved walnut with mosaic panelling. The chancel is lighted by five single-light windows of exquisite colouring from the designs of Burne Jones. On the right is a fine organ, the gift of Miss C. M. Yonge, the novelist. Leaving the chapel, the dining-hall, a large building, is seen on

the right-hand, and at one end is a clock-tower built of shingles—the gift of a visitor. Beyond are the missionaries' quarters, and the buildings occupied by the natives. Altogether the Mission appears a pretty and pleasant place, and the good work done throughout the Islands of the South Seas attests its usefulness.

Lord Howe's Island is the southernmost of the outlying islands on the east coast of Australia. It is only five and a half miles long by one and a half across, and in one part only a quarter of a mile wide. The few families who live here grow plentiful stores of provisions, and are bountifully supplied with fish all round their coast. The country is mountainous, the most prominent object being the double mountain at the south end, the highest point being Mount Gower, two thousand eight hundred and thirty-four feet high. The summit of this abruptly rising Mountain is a plateau, having a small lake in the centre, surrounded with bush full of wild pigs and goats. The vegetation of the Island is quite tropical, cabbage-palms and banyan-trees abounding, while bananas, oranges and Indian corn grow well.

NEW CALEDONIA.

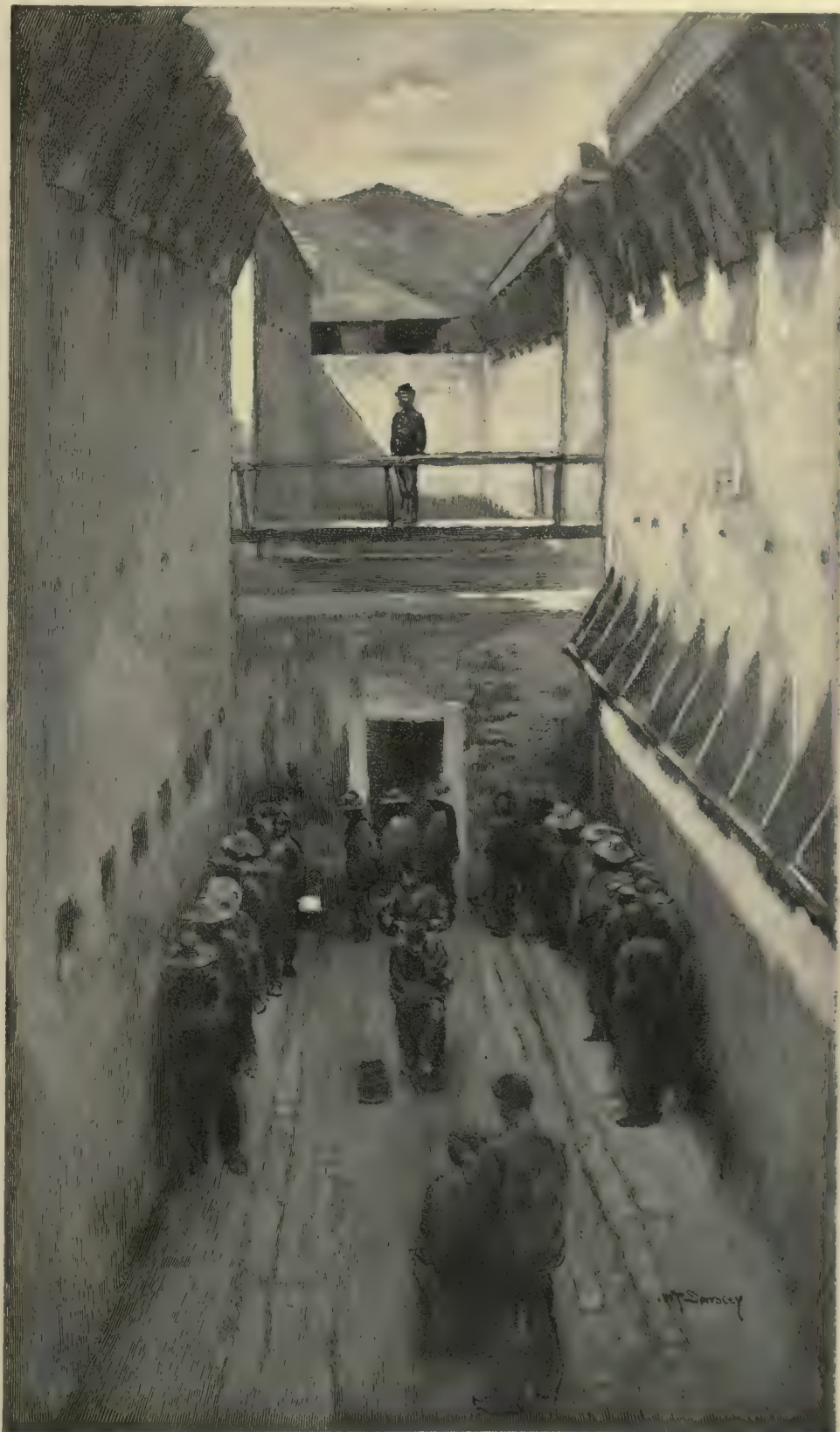
NEW CALEDONIA commands a special interest for the people of Australasia, inasmuch as it is the foreign possession that lies nearest to our shores. The territory was one of the many discoveries of Captain Cook, who landed there on his cruise of 1776, and named the Island in the same spirit that dictated the name of Eastern Australia, from its real or fancied resemblance to some portion of the Scottish seaboard familiar to his own earlier experiences. For many years the Island



NOUMEA, THE CAPITAL OF NEW CALEDONIA.

was left undisturbed by any foreign visitors,—unless, perhaps, when from time to time the primitive stillness of its quiet bays was rippled by the restless keel of some enterprising French or English navigator who might have put in there for water or to refit. Later on, as the vague and irregular reports that reached civilization from these sources began to take definite shape, far-seeing people in Europe learned to look on these distant lands as offering a field for their spirit of enterprise. In this way the French missionaries came, and earnest men with no personal ends to serve pioneered the advance of civilization among the island tribes, as De la Salle and Marquette did along the banks of the Mississippi and St. Lawrence. Nearly eighty years passed away from the date of the discovery before the existence of New Caledonia was officially recognized. The incident that led to this is characteristic of the story of the South Seas. The French frigate *Alcmène*, under the command of Comte d'Harcourt, touched at one of these havens in 1851, as so many unrecorded visitors had before him. A boat was sent ashore to reconnoitre. The crew strayed into an ambush of the natives, and were massacred to a man. This tragic event directed the French official mind to the island lying unclaimed by any civilized power, yet full of possibilities to the enterprising colonist who might courageously elect to make his home there. The Emperor Napoleon III. lost no time in taking the necessary steps towards proclaiming the Island a French possession, and the tricolour was formally hoisted by Admiral Febvrier-Despointes, in the name of his imperial master, and without opposition on the part of the aboriginal inhabitants, on the 24th of September, 1853. From this date the history of New Caledonia as a French colony begins. The Pine Islands, some few miles to the south, were annexed in the same way the next year; and though the natives, beginning to realize that their freedom of action was slipping away from them, shewed some opposition to the rule under which their possessions had passed, French authority gradually made itself felt, and the work of annexation went on as it has always done when urged by civilized new-comers against a savage people. So far as the influx of European settlers was concerned, progress for the first ten years continued slow and unpromising enough, but a new state of things was inaugurated when, in 1864, the Emperor decreed the establishment of a convict settlement at New Caledonia. Just at the time the question of the treatment of criminals in France was under debate. Cayenne, which for many years had been the destination of French *déportés*, had earned such a terrible reputation as the grave of transported offenders, and the rate of mortality from fever there was so high that sentence of exile had become synonymous in the public mind with sentence of death. The galleys of Toulon had long been the scene of such vice and misery among the *forçats* there as to outrage the public sentiment of the country. It was felt that circumstances and the results of official inquiry imperatively demanded some change in the administration of the penal department, and, in the difficulty that presented itself, the project of deporting criminals to New Caledonia was hailed as an inspiration. The suggestion was at once acted on. That most hazardous colonizing material, a convict population and its officers, obtained a footing in the Island; and, though the evil was in itself a small one at first, it was the initial step towards that which has since made the existence of a prison settlement in New Caledonia a menace to the whole sea-board of Eastern Australia. While the Empire lasted—that is, up to 1870—the penal establishment in the Islands was

efficiently conducted. Prisoners were sent there under such an adequate guard as to make discipline effective and escape impossible; and so long as these conditions continued, the settlement was sufficiently distant from the Australian coast to leave the danger of contamination comparatively non-existent. But quite another state of things came in with the Republic. When the Commune fell in Paris, and the prisons were filled with persons convicted of having taken part in the destructive operations of that body, M. Thiers found himself confronted with much the same problem as that laid before Napoleon III. by his advisers nearly twenty years before. His decision was a similar one. Regulations were passed, under which New Caledonia thenceforth became the receptacle for all classes of offenders, political or criminal, and convicts began to be deported in such numbers that the character of the penal establishment there was radically changed, and many half-punished offenders were allowed semi-liberty. The criminal population rapidly out-grew the ability of its guard



THE INTERIOR OF A NEW CALEDONIAN PRISON.

to preserve real discipline. Order degenerated into lawlessness and disorder, until the state of things occurred which has made New Caledonia a danger to its Australian neighbours.

The colony of New Caledonia consists of the large Island of that name, lying about a thousand miles from the east coast of Australia, in latitude twenty-two degrees south,

and longitude one hundred and sixty-four east, together with the small Islè of Pines, and the islets in its neighbourhood. The Island itself is one hundred and ninety miles long and thirty miles wide, trending north-west and south-east. French rule is acknowledged over the Islands of Lifu, Mare and Uvea, forming the Loyalty Group, but the area of New Caledonia is more than double that of all the other French territory in these parts, comprising a superficial extent of some three million seven hundred and five thousand acres. The main Island differs also from the rest of the Group in the fact that while most of the smaller islets are of the usual low coral growth, with their surfaces



NEW CALEDONIAN CONVICTS MAKING ROADS.

almost on a level with the sea, New Caledonia is of volcanic origin, and at first sight from the sea would seem to consist almost entirely of a series of lofty mountains of wild and savage aspect. These mountains are of serpentine formation, and their peculiar dome-like shape and strange ruddy colour are very characteristic of the scenery of this Island. It is entirely surrounded by a barrier reef of coral for-

mation. Following the dip of the ground on the main-land, which slopes more gradually on the west coast, this reef is several miles away on that side, while on the east, where the slope is more rapid, it lies much nearer the shore. A pass or opening is found in front of the principal rivers, and the traveller entering one of these for the first time cannot fail to be struck by the character and beauty of the scenery. The pale green of the calm and shallow lagoon, flecked with the strange triangular-shaped sails of the native canoes, is separated from the tumultuous roll of the outside sea only by a curling white fringe of foam, marking where the long wash of the Pacific breaks on the narrow barrier of coral. The quiet lagoon is one of the principal fishing-grounds of the natives, and the bright water is rich with all the magical charm of life and colour, in fish, or shell, or coral, that forms the allurements and fascination of these tropical seas. A foreground of shore, lined with dark-green patches of forest and mangroves concealing the mouths of the Island rivers, is thrown out against a *résistance* of purple upland broken by depths of blue, through which the folding hills can be seen billowing away in the farthest distance. Now and then along the shore the waving tops of cocoa-nut palms distinguish the villages of the native people. A mountain range runs down the full length of the Island, throwing off spurs which in some places run in rugged ridges to the water's edge. The east coast shows the most striking instances of this, and the

high barren peaks of these eruptive masses, stretching for miles along the shore and forming frowning precipices over deep blue water, are very striking objects. They strongly impress the spectator with the conviction that these desolate heights are Alpine summits resting on some submerged continent. "The impression of lonely desolation," says an observant resident in New Caledonia, "is almost strengthened by a nearer view. From the deathly stillness of their peaks, from the absence of animal life and the steep inaccessibility of their sides—whose scant vegetation cannot hide the wild masses of ferru-



CONVICTS WASHING CLOTHES, NEW CALEDONIA.

ginous and scoriatic *débris*, or the larger heaps of argillaceous jasper of fantastic shapes and colours scattered about, while the action of water has hollowed out deep furrows on their flanks which form motley stains in strange contrast to the ruddy hue of the mountain itself—the mind of the traveller is deeply imbued with an impressive sense of these deep solitudes and awful silences."

The natural features of other portions of the Island are not so bold. Green forests break the sombre character of the scenery, and level tracts along the sea-board soften down the outline of the shore. This strip, which averages on the east coast only a few hundred yards in width except in the valleys of the larger rivers, is sometimes seven or eight miles broad on the west coast. The soil is of stratified and metamorphic formation, showing traces of coal-measures and copper veins, and forming a succession of low, rolling grass-covered hills several hundred feet in height, interspersed with plains of black clay. The aspect of these lowlands fulfills in no way the conventional idea of tropical scenery. They cover only a fifth of the whole island, and comprise the only land available for agriculture or pasturage. The rest of the territory is mainly made up of the rugged central mountain chain; but this has been proved to contain wonderful mineral wealth, tempting enough to attract that enterprise and capital for which the less wild portion of the country offers so small a field. Gold, iron, silver,

cobalt, chrome and lead have been found, while nickel in the form of a hydratic silicate of nickel and magnesium has been met with in enormous quantities diffused throughout the mountainous districts. These elevated regions also send down numerous rivers to the sea, and although these streams spread into dark, sluggish, canal-like forms among the mangrove-covered mud swamps at their mouths, they have an entirely different character among the hills. Here they form bright sparkling streams, dashing over roaring cascades, or coursing above strong beds of rounded boulders, with deep calm intervening pools. The scenery resembles that of some of the Scottish rivers, and they



A CONVICT COMPOUND IN NEW CALEDONIA.

abound in a fly-taking fish resembling perch. A promising field for pisciculture exists in New Caledonia, and it is admitted that if the introduction of salmon and trout were undertaken systematically the numerous suitable streams could be turned into a prolific source of wealth. Their indigenous productions even, when

better known, combined with the natural beauty of the scenery and the healthfulness of the climate, will doubtless attract a large yearly influx of Australian tourists as do the Norwegian streams of annual visitors from other parts of Europe.

The chief interest of New Caledonia to Australia lies, of course, in the fact of its being a French penal colony. Since the first consignment of *déportés* arrived in the frigate *Iphigénie*, under the governorship of Admiral Guillain, in April, 1864, the number has gone on increasing, until it now reaches upwards of twelve thousand men and women, inclusive of those holding tickets-of-leave. This is nearly double the whole of the rest of the population, including both soldiers and settlers. Grim stories are told of convictism in New Caledonia, and miserable tales have been current from time to time respecting the lax discipline, the excesses, and the general disorganization of the official system administering this huge social anomaly. Some attempt has been made of late years to remedy these things in a measure. The more formidable criminals are confined in the penal establishment on the Ile Nou, an island at the mouth of Noumea Harbour, about one mile from the town. Some five or six thousand convicts are hived here in the prison buildings distributed over the Island, which is three miles long by about three-quarters broad. The prisoners are classified into five divisions, according to the character of their offences, and those in the fifth or more desperate class are never allowed beyond the walls, while many are kept continually in chains to prevent their escape. Other divisions are set to work under an armed guard, but never allowed to leave the Island; while the greater number are conveyed to the main-land daily in punts, carrying gangs

of stated numbers, and there set to labour on the roads, erecting public buildings, or otherwise assisting in the Government works of the colony. Every morning, as these labour-gangs land from the punts, they are received on the quay at Noumea by a strong military guard, and embarked in the evening in the same way; while an armed guard of *surveillants* overlooks them at their work. Notwithstanding these precautions, frequent attempts to escape are made, and the warders have standing instructions, which are not allowed to remain inoperative, to shoot down any convict showing any inclination that



A PAPUAN VILLAGE, NEW CALEDONIA.

way. Attempts at escape, more or less successful, are made almost every day from these gangs, as well as from the labour camps, numbering fifty or a hundred men, which are distributed about the colony. The escapees, or *evadés*, sometimes remain at large for months, levying black-mail on the settlers and natives, and not infrequently adding to their record of serious crime. Every now and then, tales are told of convicts escaping in small boats and making their way in the face of terrible privation to the Australian coast. From this circumstance the dissatisfaction on the part of the Australian colonies arose, for the colonists naturally objected to their ports being made places of refuge by this dangerous and highly undesirable element. The protests of the colonies induced the British Foreign Office to take action, but the official remonstrance to the French Ministry was met by an assurance on the part of M. Ferry that his Government refused

to acknowledge the right of the British Authorities to interfere in a question which, he maintained, concerned the internal administration of France. The colonies, however, carried on the agitation; and the news of the passing of the new French Measure to make New Caledonia a place of deportation for habitual criminals gave rise to very bitter feelings. Public meetings have been held on the question, and threats openly made to charter a ship and convey all French convicts now in Australian gaols to France, and land them bodily there. Between July and October, 1883, no less than fifty-three public demonstrations were held in the principal Australian cities to protest against the recent action of France in the matter. Lord Derby communicated the resolutions arrived at to the French Government, merely receiving an assurance from M. Challemel-Lacour, in reply, that the Récidivist or Habitual Criminal Bill had not at the time become law. Advantage was taken of the pause thus secured to deport several hundred récidivists to New Caledonia, notwithstanding the remonstrance of the British Ambassador at Paris. Ultimately, the Measure passed, and under its provision any *Tribunal Correctionnel* may order the transportation (a) of any criminal who, within a period of ten years, shall have suffered imprisonment four times, for terms of three months or upwards, for certain specific crimes; (b) of persons who, in a period of ten years, shall have been sentenced to *travaux forcés* on two separate occasions, or once sentenced to *travaux forcés* and once to imprisonment for three months; (c) or of those who, in the space of ten years, shall have been sentenced on six separate occasions, including at least one term of three months' duration. From these provisions it will be seen that the purpose of the penal establishment in New Caledonia is to provide a receptacle for the criminal classes of the mother-country. Récidivists so transported receive grants of land, and no disabilities are placed upon them other than a prohibition to return to France. They are not herded with the convicts, but regain their civil rights in the colony. The object of the Bill was to provide a population for the colony, by relieving the correctional system at home, and, so far as it goes, the plan may be said to have presented at first the appearance of just such a humane socialistic experiment as would afford a philosophic French theorist delight. The model aimed at was that of the Australian colonies; but, so far, those responsible for the working out of the theory have only succeeded in producing another Norfolk Island on a somewhat larger scale, instead of a second New South Wales. The scheme has been left to work itself out in the hands of officials whose interest in the experiment is anything but a philosophic one, and the result is found to be much the same as that arrived at under our own convict system in the earlier stages of Australian colonization—with the radical difference, however, that these colonies offered room for expansion and pastoral settlement, which New Caledonia certainly does not. The *libéré*, who is placed on the land as a settler, is not always the best individual to experiment upon, but the unwieldy system finds relief by disburdening itself in this way of the responsibility of his support. Convict women of the worst class, who are very numerous in New Caledonia, help to make the task of reform almost a hopeless one, and the lawless character of these people keeps the colony and its better disposed settlers in a condition of continual ferment and restless agitation. Some of the *déportés* are hired out as labourers on easy terms to the colonists. It is not to be supposed that the whole of the convict population of New Caledonia belongs to the hopelessly

criminal class. Many of those who have been deported for even serious offences are remarkable for their quiet and orderly temperament and capacity for hard work. This is particularly noticeable in convicts from the country districts, and these form the best material for the operation of the experiment of regeneration. Of this, the late Governor, M. Pallu de la Barrière, was the enthusiastic apostle. A man of great individuality of character, with vast enterprise and much philanthropy, he did much the same kind of work in New Caledonia as Macquarie did in early New South Wales. This officer gave special attention to the opening up of the country by means of good roads, employing for the purpose the more dangerous criminals who had hitherto been kept in idle confinement at the Ile Nou. To the better behaved men he gave grants of land, to be held during good behaviour. His short term of authority saw great progress and substantial reforms; but since his untimely recall—due, it is believed, to a charge of too great leniency in his treatment of the convicts—the colony has drifted back almost to the stage at which he found it. M. de la Barrière offended a certain class by discountenancing the ill-treatment of convict labourers. The masters, in many instances, carried matters with a very high hand, and the lash and imprisonment in private



KANAKA WEAPONS, NEW CALEDONIA.

cells were frequently resorted to. This course of conduct, by driving the men to desperation, is to a large degree answerable for the criminality of New Caledonia.

The social condition of the colony, as might be expected in a penal settlement, is somewhat chaotic. Where the population is largely made up of liberated *déportés* and their masters, it is natural to suppose that very decided social institutions may be looked for in vain. A Governor is appointed by the French Authorities at home, who is assisted in the administration of the colony's affairs by the heads of the various departments of the local Government service. He presides over a Council, composed of the Director of the Interior, the Commandant of the Forces, the Chief of the Convict Department and the Chief Justice. Two private citizens, nominated by the Governor, represent the civil interests; and matters relating to finance are regulated by four members of the Municipal Council of Noumea, with three other nominees of the Governor selected from the other municipalities. Justice is administered by a "Tribunal of the First Instance" and a "Court of Appeal," sitting at Noumea; while four *Juges-de-paix* preside over Courts at Noumea, Onégoa, Bourail and Chepenehé. The primary schools previously conducted by the Marist Brothers and the Sisters of St. Joseph, who have in the past done much good work in New Caledonia, have of late years been laicized under the law of the Republic to that effect.

The aborigines of New Caledonia comprise between thirty and forty thousand persons. They belong to the Papuan race, being generally of a dark-brown colour, with woolly hair, and are known by the general name of Kanakas. Small groups of families collect into villages separated several miles from each other, forming settlements of different tribes, speaking different dialects, and having each its own land limits. The dwellings are of bee-hive shape, thatched with grass, and usually about twelve feet high. The chief's hut is distinguished by being thrice as high, and is placed in the centre of the village, with an avenue of trees before it for tribal dances or meetings. Here the older men spend the livelong day in gossiping groups round the fire, the low monotone of their voices blending drowsily with the humming sound one of their number is certain to be producing from the long reed pipe which forms their sole musical instrument. The younger men make nets or mend weapons, repair canoes, or shape the stones they use with deadly effect in their slings. The women flit about preparing food, or bear provisions around the village, as they are the universal carriers; or perhaps they may be seen cooking at the fire, using for the purpose the peculiarly shaped conical earthenware pots which they make themselves. The natives do not know the use of the bow and arrow, spears and slings being their only missiles. The spears are made of a peculiar wood, hardened in fire; while the slings are of cord, the stones being rounded like an egg, but longer and more pointed. Clubs are of various shapes, from those with round heads to those that are bent and pointed like a pick. There is also the chief's greenstone tomahawk. Before the coming of the French these savages were enthusiastic cannibals. Their chief occupation is the cultivation of the *taro*, a root that requires a good supply of water. This is conveyed in aqueducts constructed of earth and wood, sometimes ten or twelve miles in length, and over terraces covering miles of country on the sides of the hills. These cultivation areas make a fine sight as seen from some neighbouring elevation, with acre after acre of these terraces, each with its

silver streak of water gleaming in the sun. The natives are also expert fishermen, using for the purpose a three-pronged fish-spear as well as the nets on which they chiefly depend. They are made of the

tough fibre of a tree called *man-yan-ye*, employing the same knot as European fishermen use, with much the same shuttle. The nets used in the capture of dugong and turtle are

of great length and weight, and require the aid of canoes to be laid with effect. The most curious,



MULLET AND DUGONG FISHING.

however, is that used in the capture of the mullet generally found in shoals in the brackish water at the mouths of rivers. These nets hang down perpendicularly several feet in the water, and are attached along their full length to a narrow raft. Mullet are known to jump over an ordinary net, but they are retained by these rafts, and the

FISHING WITH SPEARS.

crowd of swimming fishermen around quickly quiet them by a crunch between their jaws.

The death of a New Caledonian chief is celebrated with much ceremony. His wives generally strangle themselves. The body is wrapped in mats and placed in a sitting attitude, some male attendants, from six to twenty-four in number, being appointed watchers. Their hair is cut short, and they are smeared with charcoal and oil, becoming strictly *taboo* to the sight of the women. The people retire early to their huts, while the deceased is borne round by the watchers to the chief's favourite haunts in life. When the body is sufficiently decayed, it is taken into the bush and decapitated by the chief mourner. During their vigil with the departed warrior, the watchers have to go through much tedious ceremonial. All food is thrown into their mouths by another, and no one is allowed to partake with his own hands. Every action is accompanied by the triple repetition of a certain cabalistic word. During this period, they are occupied in making the gigantic masks of carved wood, painted black, which is placed over the head and covered with sable feathers and hair reaching to the knees. When the body has been deposited in the bush and the tribe assembled, the women painted white and wailing lugubriously, the watchers disguised in their masks spring out of the scrub brandishing spears and fire-sticks. The chief mourner advances from the bush with the dead man's head held aloft, and shows it to the assembled tribe. The principal men address short speeches of ceremony to it and to the mourners, and the head is then interred in some almost inaccessible cave which forms the tribal cemetery. Food is left for the dead in remote places, and the religion is a worship of ancestors who are supposed to act the part of tutelary deities.

Settlement in New Caledonia may be said to date from the coming of Mr. Henry and Captain Paddon, who were respectively English and Australian. The town of Noumea, the capital of the colony, owes its existence to Mr. John Higginson, originally of Adelaide, whose name is representative of the business energy and enterprise of the Islands. He first settled here in 1863, and his forethought planned the town and laid it out, as his activity was mainly instrumental in the erection of the principal official and private buildings and the alignment of the roads that open up the interior of the Island. The design of the town is regular enough, but the building up of Noumea has not been in harmony with the character of the plans. Most of the houses and minor places of business appear to have been carelessly built of wood, roofed with the corrugated iron that is so ill-suited to the requirements of these tropical countries. The capital is enabled to present a better appearance than private effort might have given it, from the fact that it contains the principal Government buildings, the residences of the Governor and officials, the military barracks and the head penal establishments. Approached from the sea, the town is seen to lie in the hollow of a plain between two groups of hills, its rectangular sections and the straight lines of its streets presenting to the distant eye the regularity of a geometrical figure. The population of the town of Noumea itself, as may be expected, is made up of a strange agglomeration of representatives of the people of many nations. The French are of course in the majority, but the total is swelled by traders and planters from Australia, English, Italian and German settlers, and visitors from Bourbon and the Mauritius, with a residuum made up of Malays and Asiatics, and natives from the New Hebrides and other neighbouring islands. The whole colony was,

in 1879, divided into five cantons, each of which is ruled by a municipal council, with the privilege of levying its own rates and taxes, constructing public works, opening up roads, administering the law relating to grants and tenure of land, and other less important duties. The cantons were those of Noumea, which had six hundred and eighty-three electors on the district roll when the colony was first divided in 1879; Kanala, with one hundred and four; Houailon, with ninety-eight; Touho, with forty-two; and Onégoa, with ninety-four. These



THE OBSEQUIES OF A KANAKA CHIEF.

numbers have since materially increased in some cantons, particularly in that of Noumea, but their relative importance remains about the same, and the central canton is the only one which can really be said to enjoy any actual return for its rates. However, the colony

is generously assisted by the mother-country, and upwards of half a million sterling annually appears for New Caledonia in the budget of the French Minister of Marine and the Colonies. For the year 1881, by far the largest portion of this sum, two hundred and twenty-five thousand pounds, was absorbed by the convict establishment; about sixty thousand pounds were spent on naval and military expenses; and upwards of one hundred and thirty thousand pounds on postal and telegraphic services.

The colony is in no sense self-supporting, and, considering the heavy cost of the convict establishments and system there, it can scarcely expect to be so. In the year for which figures have already been quoted, the principal items of local revenue were derived from the tax upon wines and spirits, fourteen thousand six hundred pounds; the sale of lands, eighteen thousand three hundred and sixty pounds; and the tax on land, two thousand two hundred and fifty pounds. The local budget provides for an expenditure of seventy-six thousand six hundred pounds. The commercial statistics of the colony continue to stand at a low figure, and the returns for the years 1880 and 1881 showed a decrease from three hundred and sixteen thousand one hundred and seventy-seven pounds to two hundred and eighty-four thousand five hundred and sixty-four pounds on imports, and from one hundred and ten thousand two hundred and eighty-six pounds to sixty-one thousand three hundred and sixty-two pounds on exports; of the imports in that year it may be mentioned that the cost of the rations for the supply of the total of ten thousand prisoners, at that time distributed over the Island, amounted to a sum of eighty thousand pounds. The public works of the colony are, of course, largely carried out by convict labour, as already described; but this is supplemented by an annual municipal vote by the council of Noumea of ten thousand pounds. The principal industrial operations of the Island are confined to these public works, mining and planting.

Since 1880, the mineral prospects of the colony have attracted marked attention from Australian colonists, many of whom have embarked both capital and labour in their working. Companies have been formed, some of them influentially represented and commanding considerable capital. Copper has been found in thirty-six localities, the most promising being those of Balade and Bomamoula, where workings have been in operation for some years. Up to the end of 1883, the Balade Mine had exported forty-three thousand tons of metal, the pure copper averaging seventeen per cent. These mining operations afforded at that time employment to over four hundred workmen, three-fourths of whom were convicts released on tickets-of-leave. The nickel mines have also been very active. The head-quarters of these operations are at Thio-Canalo and Houailon, and the annual exports have reached one hundred thousand pounds in value. The drawback to the industry lies in the impossibility of thoroughly treating the ore locally, and the expense of shipping it to France has proved a damaging item against the complete success of these nickel mines. Iron has also been worked with some success, the most promising mine for a long while being that known as the "Lucky Hit," held by some Australian miners. What has been done up to the present in the shape of industrial development has been merely sporadic, and the preponderance of a convict population over free settlement has, so far, stood in the way of anything like distinct advance along the whole line. The encouragement of free immigration is spoken of as the panacea for the politic ills from which New Caledonia suffers, and it must be confessed

that until something definite is done in this direction it will be futile to look for any material advance in the face of the insecurity arising from the lawlessness of the dangerous portion of the population, and the stagnation in commerce and trade.

For the last few years the French Government has been endeavouring to encourage emigration to New Caledonia, by the offer of guaranteed assistance to settlers. Free passages to French citizens who have completed the term of their military service, grants of land from nine to twelve and a half acres, and an additional concession of nine acres on the marriage of any member of the emigrant's family, are among the inducements that have been offered by placard on the walls of every *mairie* in the country districts at home. Immigrants from Alsace and Lorraine are specially encouraged by grants of twenty-five acres. Settlers from countries other than France receive what



NOTRE DAME ROCK.

are known as "*concessions à titre onéreux*," permitting them to purchase land at ten francs per acre, payable in advance by twenty-four half-yearly instalments.

Pastoral operations have been languishing lately from a variety of causes, among which must be named the native troubles with which the colony is afflicted. The aboriginal tribes have at times found the incursions of the horned cattle of the settlers detrimental to their own attempts at agriculture, and a revolt of the natives in 1877, which resulted in great disaster to the outlying white population, was nearly due to this cause. The question of their protection from trespass has engaged the attention of the Government, whose task has not been lightened by the fact that the price of cattle has of late fallen appreciably, since the tendency to allow stock to stray must increase as their value goes down. The price obtainable for horned cattle has fallen about seventy-five per cent. during the past few years, principally owing to over-production, the incidence of unwise and ever-changing land-laws, and alterations in the price per acre by Governmental regulation. Older settlers who bought at the higher values have been brought to the verge of ruin by this recent lowering of the upset price. Agriculture has not made much progress in the colony. Attempts to cultivate sugar and rice, for which the soil is more suitable than anything else, have only resulted in failure; and though coffee planting is still going on, the want of labour is a serious drawback to its success.

On the whole, then, though it must be conceded that the experiment in New Caledonia tells rather against the adaptability of the French settler to the work of colonization, it must be acknowledged that the disabilities he labours under there have much to do with the unpromising result. The competition between the penal and free labour is the first of the colony's drawbacks. It has long been proved by experience in other places that settlement develops better under responsible effort than under the forced and subsidized labour of convicts. Then the coldness and sterility of the soil, which, in all the plains but those formed by alluvial deposit at the mouths of the rivers, is of a stiff clayey nature, constitutes a permanent discouragement. The lack of capital in the colony, which is only to be got in small amounts, and at the exorbitant legal rate of twelve per cent. interest, seriously discounts one of the first conditions of enterprise. But the chief cause of the stagnation of the colony is to be found in the hasty and inexperienced legislation of the local authorities, and the unwise attempt to acclimatize unsuitable French laws that necessarily conflict with the conditions of a new colony. This has especially been the case with regard to agriculture, while the mining laws have hopelessly retarded what should have been the principal industry. The first discoverers of gold, for example, obtained concessions of blocks of land so large that they embraced the whole field and shut out all enterprise. This so discouraged the miners who were drawn to the spot that little or no attempt at gold-seeking has since been made. The prospects of New Caledonia as a mining centre hold out, however, great promise for the future. Gold doubtless exists in the Island in considerable quantities. Nickel is found in almost inexhaustible stores, and this mineral itself, especially were science to apply its non-oxidizing qualities largely in the arts and manufactures in conjunction with the common metals, might afford occupation for many times the present population. At present, in the absence of enterprise and capital, mines are frequently found and declared, and then left unworked. Coal-seams have been discovered, but the authorities, with a strange indifference, long left them undeveloped and unexplored. Efforts have lately been made to induce the Government to test these seams by diamond borers, and examinations were only quite recently entered upon of the more important outcrops of coal. All these considerations enter, more or less, into the question of the adaptability of the French settler to the work of colonization. Intensely economical, sober, and consistently hard-working as the French free colonist of the working classes in New Caledonia uniformly is, it is a subject for regret that his energy and courage have not been displayed under fairer and more favourable conditions.



PHYSIOGRAPHY OF AUSTRALASIA.



THE SYDNEY OBSERVATORY.

GEOLOGICAL FORMATION.

THE geology of Australasia is of special interest. The vast Island Continent of Australia is built up of formations corresponding to those composing other parts of the globe; at the same time, it possesses features peculiar to itself, and thus a new field of research is presented. A geologist landing upon these shores at once recognizes rocks similar in character, and in some of their embedded fossil remains, to those with which he is familiar; and he is inspired with new zeal when he finds evidence of life-remains not known elsewhere, which enables him to add to the present incomplete knowledge of the past life-history of the earth. Besides this, portions of Australia have existed as dry land from remote geological periods to the present day, and hence, as might be expected, our living fauna and flora include ancient types. For a long period these old land-surfaces appeared as comparatively small islands. Some idea of the depth of the ocean that surrounded them may be formed from the fact that the layers of marine sediment, which form the great plains of the interior, have been pierced by the boring-rod to a depth of over one thousand six hundred feet, and then not passed through.

Australia, once small islands, but now a vast continental area, may, therefore, not inaptly be looked upon as foreshadowing the growth of the future nation into which, from

small isolated settlements, the present disunited colonial elements are gradually being welded. Then, the geology of Australia teaches a lesson not only of high scientific interest, but one of great commercial significance, namely:—that the formations afford evidence of an enormous area of soils adapted for agricultural and pastoral purposes, and also of the rocks that indicate rich mineral resources. In these we have assurance of the future occupation of Australia by a vast industrial population.

On reference to a geological map of Australia, it will be seen that the features of the coast-districts, as well as of considerable portions of the interior, have been more or less definitely ascertained. But a large extent of the interior has not yet been examined. Nevertheless, from the explorations already made, we learn that it is not a worthless desert—that the rocky slate and granite hills, which were at first traversed with such difficulty by the explorers, show the existence of the great metalliferous formations; and that the wide-spreading stony downs, so deficient in permanent surface-water, indicate the enormous area of artesian water-bearing *strata*. And it will further be seen that we have formations of igneous and sedimentary origin representative of most of the principal epochs of the earth's history, as recorded in the well-investigated lands of the Northern Hemisphere. And what we find here, in regard to the fossil contents of the rocks, corroborates observations made elsewhere, that, the farther we go back into the past, the more universal and uniform were the life-conditions of the earth. Thus, the more ancient formations of Australia yield fossils of species identical with those found in *strata* of the same age in other parts of the globe; we may, therefore, infer that in the earliest epochs certain forms of life were unlimited in their range, and that as the surface of the globe became in places more and more altered by physical changes—old lands sinking beneath the ocean and new ones rising from it—so the ancient types of life gradually modified in adaptation to their altered environment, and thus the progressive differentiation resulted in the varied animals and plants that we find now living in the different regions most suited to them.

In portions of the globe, such as Britain, where geological changes have been frequent, it might naturally be inferred, as we find it to be the case, that corresponding changes in the animal and vegetable life would be so marked as to lead to the belief that old races had suddenly disappeared and given place to others quite distinct. But in other portions where the old land-surfaces have remained during long periods, modified only by slight physical changes, we should expect the persistence of the ancient types of life, not only upon the land, but in the surrounding ocean. And such we find in Australasia, which, on this account—possessing surviving ancient forms of life long since extinct elsewhere—affords one of the most interesting and important regions of the globe for investigation in various branches of science. The botanist and zoologist would be at a loss to account for the origin of the living flora and fauna peculiar to Australia, did not the palæontologist and geologist come to their aid with the “testimony of the rocks.”

A few years ago, a small pine, *Pherosphaera Fitzgeraldi* (F. v. Mueller), was found growing in a moist and cool shady place in one of the precipitous ravines of the Blue Mountains, near Katoomba; its nearest living relative, the “Huon Pine,” now occupies the cooler region of Tasmania; and geological evidence points to the conclusion that the little Blue Mountain pine, owing to its damp secluded retreat, has survived from the

Pleistocene, or great rain-fall period. Then, again, the "pouched hyæna" (*Thylacinus*), and the *Sarcophilus*, or "devil," whose bones are found plentifully in the Pleistocene deposits in the Wellington Caves, have become extinct in Australia, though they still live in Tasmania. Why the indigenous mammals of Australia belong chiefly to the Marsupialia, while this low order of mammalia became extinct in Europe in ages far back; and why our living vegetation possesses certain ancient forms, geology is beginning to reveal—we say is *beginning*, for the little evidence already obtained indicates the wide field that yet awaits geological research.

Moreover, the occurrence of the above-named animals being common both to Australia and Tasmania, points to the former land connection of these colonies at no distant date. During the Miocene period they were separated by water much wider than the existing Bass's Straits; for, on the southern coast of Australia, and for a considerable distance inland, and on the opposite or northern coast of Tasmania, are formations several hundred feet in thickness, composed of horizontal *strata* full of Miocene marine shells and corals. The upheaval of these *strata*, to a height of at least six hundred feet above the sea, took place during, or at the close of, the Pliocene period, and this elevated sea-bottom became dry land, uniting Tasmania to the Continent, and affording a passage for the Pleistocene animals, until, either by denudation or volcanic disturbance, some of the newly-made land gradually disappeared, and the inroad of the sea formed Bass's Straits, and Tasmania once more became an island.

Beneath the marine and Miocene *strata*, which are seen in the cliffs on the Cape Otway coast, are fresh-water plant-bearing beds. These would indicate a previous elevation of the land in pre-Miocene times. As the great Cretaceous formation of Australia is not known to the east of Spencer Gulf, it is probable that this portion of the Continent was high land, and connected with Tasmania in the Cretaceous period. From this high land may have descended the glacier which produced the polished and ice-scratched rock surfaces discovered by Professor Tate on the coast near Adelaide. While the geology of Tasmania has much in common with that of Australia, New Zealand possesses a geological interest of her own. Its recent volcanic phenomena, its magnificent glaciated mountains, the remarkable disturbances of its Tertiary *strata*, and the large development of its Mesozoic formations, contribute greatly towards the completion of the geological record of Australia. Indeed, while in Australia and Tasmania the Palæozoic formations are largely developed, in New Zealand the Mesozoic and succeeding formations, including the Recent, are very completely represented; and the whole series are so united by a commingling of their fossil remains, that it is at times difficult to assign the limits of the different formations; in fact, the geological record of this portion of the earth represents one continuous life period.

Sir James Hector, M.D., F.R.S., Director of the Geological Survey of New Zealand, writes—"New Zealand presents a peculiar feature on the surface of the globe, as, notwithstanding its isolated position, its structure is highly complicated, in which respect it differs from that of most of the oceanic islands. It is, in fact, the remnant of a large continent, which, formerly existing far to the eastward, has been reduced in area by the erosive action of the sea. There is reason to believe, from consideration of the existing and extinct fauna and flora, that the continent of which it formed part may have been

connected in the temperate zone with South America. On the other hand, there is no clear evidence of its having been connected during the Tertiary times with Australia, lying to the westward. On the whole, the geological record, so far as yet known, is more complete in New Zealand than in the Australian area."

TABLE OF THE PRINCIPAL SEDIMENTARY FORMATIONS OF AUSTRALASIA, WITH SOME OF THEIR CHARACTERISTIC GENERA OF FOSSILS.

CAINOZOIC, OR	POST TERTIARY	Recent	Human bones and implements; remains of plants and animals of living species; <i>Dinornis</i> , <i>Aptornis</i> , &c. (extinct). <i>Diprotodon</i> , <i>Macropus</i> , <i>Thylacoleo</i> , <i>Thylacinus</i> , <i>Thylacopardus</i> , <i>Notiosaurus</i> , <i>Megalanis</i> , <i>Dromornis</i> .
		Pleistocene	<i>Spondylostrobus</i> , <i>Wilkinsonia</i> , <i>Penteteune</i> , <i>Plesiocapparis</i> ; <i>Unio</i> , <i>Rotella</i> , <i>Pleurotoma</i> , <i>Pecten</i> , <i>Pileopsis</i> , &c.
MESOZOIC, OR SECONDARY	TERTIARY	Pliocene	<i>Squalodon</i> , <i>Trigonia</i> , <i>Terebratula</i> , <i>Clypeaster</i> , <i>Murex</i> , <i>Fusus</i> , <i>Cucullæa</i> , <i>Corals</i> , &c.
		Miocene	<i>Fagus</i> , <i>Quercus</i> , <i>Cinnamomum</i> , <i>Pteris</i> , <i>Getonites</i> , &c.; <i>Insects</i> ; <i>Limopsis</i> , <i>Voluta</i> , <i>Cypræa</i> , <i>Dentalium</i> , <i>Cardium</i> , <i>Cardium</i> , <i>Meoma</i> .
		Eocene	<i>Protophyllum</i> , <i>Oleandridum</i> , <i>Dammarites</i> , <i>Auricaurites</i> , &c.; <i>Ichthyosaurus</i> , <i>Plesiosaurus</i> ; <i>Ammonites</i> , <i>Belemnites</i> , <i>Cideris</i> , <i>Avicula</i> , <i>Trigonia</i> , <i>Baculites</i> , &c.
		Cretaceous	<i>Pecopteris</i> , <i>Taxites</i> , <i>Pterophyllum</i> , <i>Macrotaeniopteris</i> , <i>Taeniopteris</i> , &c.; <i>Ammonites</i> , <i>Belemnites</i> , <i>Rhynchonella</i> , <i>Spiriferina</i> , &c.
PALÆOZOIC, OR PRIMARY		Jurassic	<i>Belemnites</i> , <i>Plagiostoma</i> , <i>Pholidomya</i> , <i>Spiriferina</i> .
		Liassic	<i>Macrotaeniopteris</i> , <i>Taeniopteris</i> , <i>Gangamopteris</i> , <i>Zamites</i> , <i>Thinnfeldia</i> , &c.; <i>Tremanotis</i> , <i>Unio</i> , <i>Clavigera</i> , <i>Spirigera</i> , <i>Monotis</i> , <i>Spiriferina</i> , &c.; <i>Palæoniscus</i> , <i>Myriolopis</i> , &c.; <i>Mastodonsaurus</i> , <i>Platycephs</i> .
		Triassic	<i>Glossopteris</i> , <i>Vertebraria</i> , <i>Sphenopteris</i> , <i>Phyllothea</i> ; <i>Trigonotreta</i> , <i>Spiriferina</i> , <i>Epithyris</i> ; <i>Urostheneis</i> .
		Permian	<i>Glossopteris</i> , <i>Phyllothea</i> , <i>Sphenopteris</i> , <i>Annularia</i> , &c.; <i>Spirifer</i> , <i>Pachydomus</i> , <i>Productus</i> , <i>Orthoceras</i> , <i>Corals</i> , &c.; <i>Rhacopteris</i> , <i>Lepidodendron</i> , <i>Calamites</i> , <i>Archæopteris</i> , &c.
		Carboniferous	<i>Lepidodendron</i> , <i>Cyclostigma</i> ; <i>Spirifer</i> , <i>Rhynchonella</i> , <i>Atrypa</i> , <i>Orthis</i> , <i>Orthoceras</i> , <i>Corals</i> , &c.; <i>Asterolepis</i> .
		Devonian	<i>Phacops</i> , <i>Brouteus</i> , <i>Calymene</i> , <i>Pentamerus</i> , <i>Atrypa</i> , <i>Cyathophyllum</i> , <i>Halysites</i> , <i>Spirifera</i> , <i>Murchisonia</i> , <i>Graptolites</i> , <i>Didymograptus</i> , <i>Hymenocaris</i> , <i>Lingula</i> .
		Silurian	<i>Conocephalites</i> , <i>Dolichometopus</i> , <i>Dikelocephalus</i> .
		Cambrian	

PRIMARY OR PALÆOZOIC.

Cambrian.—The oldest known rocks in Australia are certain sedimentary beds, including limestones, near Adelaide in South Australia, and Tasmania, in which fossils of Cambrian age have been discovered; and in Western Victoria are some metamorphic schists which are regarded by Selwyn as pre-Cambrian or Laurentian; but hitherto no fossils have been found in them.

Silurian.—The Silurian series are extensively represented in Victoria, New South Wales, New Zealand and Tasmania. They consist of altered sandstones, conglomerates, schists and limestones, tilted into numerous anticlinal and synclinal folds, generally striking in a meridional direction, and have been estimated to be not less than 35,000 feet thick. They are traversed by gold-bearing quartz-reefs from which, and from the

alluvial deposits derived from them, the greater portion of the gold hitherto raised in Victoria and New South Wales, amounting to £256,000,000, has been obtained. In New South Wales they contain lead, silver, and copper lodes, among which may be mentioned the celebrated Broken Hill lode, from which 7,762,549 ounces of silver and 31,027 tons of lead have been obtained up to the year 1888 since May, 1885.

Devonian.—Devonian *strata* occupy considerable areas in Eastern Australia, especially in Queensland. In New South Wales they form the summit of Mount Lambie, over 4,000 feet above sea-level, and are there 10,000 feet thick; they attain a great thickness in New Zealand. Together with the lower Carboniferous beds they are also traversed by rich auriferous reefs and copper, silver, lead and antimony lodes.

Carbonifero-Permian.—The next series in ascending order, the Carbonifero-Permian, is of much economic importance, containing, as it does, not only gold deposited, but also the vast coal-fields of New South Wales, in which fifteen seams of coal of an aggregate thickness—102 feet of coal—have been opened. It has been estimated that the coal from these seams, at double the present annual output, would last for 25,000 years. The series has been classed in three divisions—the Lower, Middle and Upper Coal Measures: the lower group consists chiefly of coarse conglomerates, about 5,000 feet thick, with an abundant marine fauna; while the Middle and Upper are together about 2,500 feet thick, of fresh-water beds, two of the most characteristic fossils in which are *Glossopteri* and *Vertebraria*. The same series occurs in Western Australia, Tasmania and New Zealand. The gold-bearing geyser-deposit in the Mount Morgan Mine, near Rockhampton, in Queensland, occurs in the lower Carbonifero-Permian formation. From this Mine, in 1885–86, gold to the value of £1,021,500 has been obtained by improved methods.

SECONDARY OR MESOZOIC.

Triassic.—In New South Wales this series embraces the Clarence and Narrabeen shale beds, the Hawkesbury sandstones and the Wianamatta shales, each containing plant fossils, and the two latter, remains of *Labyrinthodonts*, with *Palæoniscus* and other fishes. It occurs with characteristic fossils in New Zealand.

Liassic.—The Catlin's River and Baston series of New Zealand have been determined by Hector to be of this age.

Jurassic.—The Ipswich coal series in Queensland is regarded by the Government Geologist, Mr. Jack, as probably belonging to the Clarence beds and of Jurassic age, to which also Prof. McCoy, upon the evidence of the fossil plants, has assigned the Carbonaceous series of Victoria. They may, however, be of Triassic age. In New Zealand they include both estuarine and marine fossiliferous beds; the latter occur in Western Australia, and in New Guinea on the Fly River and the Strickland River.

Cretaceous.—In New South Wales, Queensland, South Australia, Northern Australia and Western Australia, an immense area is composed of *strata* which have been grouped in three divisions—the Lower occurring in Western Australia, and probably in places in the central and north-eastern portions of the Continent; the Middle chiefly in New South Wales, South Australia and Queensland; and the Upper, or "Desert Sandstone," in Queensland. The Cretaceous *strata*, though generally forming country devoid of permanent surface-water, are of great importance, as they contain water-bearing beds; in the Middle

Division especially, splendid *artesian* supplies of good water are obtainable by boring. The Cretaceous gravels surrounding the Mount Brown slate ranges are being profitably worked for gold. The Cretaceo-tertiary series of New Zealand is extensively developed, and contains valuable seams of merchantable coal.

TERTIARY CAINOZOIC.

Marine beds of Eocene, Miocene and Pliocene ages form a considerable extent of the low-lying country of the southern portion of Australia, from Gippsland, in Victoria, to Western Australia; also in Tasmania; they do not occur on the eastern coast of Australia. But in Victoria and New South Wales, fresh-water deposits of gravels and clays of Eocene and Miocene age are found containing a very interesting extinct flora, corresponding with that observed in formations of the same age in the Northern Hemisphere. Fresh-water Pliocene deposits, with characteristic fossil plants, are also frequent, especially in New South Wales and Victoria. In New Zealand the Tertiary fresh-water and marine series are well represented.

POST TERTIARY.

Pleistocene and Recent.—Deposits of these periods occur abundantly upon the coasts and inland. The loam deposits of Australia forming the vast inland plains, and the terrace gravels and alluvial flats in all the main valleys, are chiefly of Pleistocene age, and, together with the cave deposits, have yielded numerous remains of extinct animals, some of which, as the *Diprotodon*, *Nototherium*, *Notiosaurus*, *Megania*, *Dromornis*, etc., were of gigantic size. With them have been found bones of animals of species now living in the same localities. The Pleistocene period was one of great rain-fall, and during it small glaciers were formed upon some of the highest mountains of the Great Dividing Range, as on Mount Kosciusko. Glacial *striæ* have been observed upon some of the schist rocks near Adelaide. Human remains have as yet been found only in the recent *alluvia*. The remarkable gigantic wingless birds of New Zealand became extinct during the Recent period.

The Tertiary and the Post Tertiary fresh-water deposits are of the highest economic importance, for they have yielded by far the greater portion of the gold and stream tin hitherto raised in Australia. In New South Wales about 50,000 diamonds have been obtained from these deposits. Extensive areas of sand-hills, formed by wind-action, occur over many portions of the Continent and give rise to barren country.

IGNEOUS AND METAMORPHIC ROCKS.

Igneous rocks occupy a very considerable area in Australasia. They comprise a great variety of granites, porphyries, greenstones, basalts, etc., some of which pass by such a gradual change from one into the other that it is often impossible to draw any definite line of division between them. On the other hand, some of them change so gradually into rocks of a sedimentary origin, as, for instance, granites into Silurian schists, that they afford convincing proof of their metamorphic origin.

Dykes of intrusive granite occur, penetrating Lower Silurian *strata* in Victoria, and Triassic beds in New South Wales have been intruded by hornblendic granite. No

igneous rocks older than Silurian have yet been noticed here *in situ*; though pebbles of diorite occur in the Upper Silurian conglomerates. But in New Zealand, granites of pre-Silurian age have been observed. Granite forms the summit of Mount Kosciusko, which is 7,351 feet above sea-level, and the highest mountain in Australia; and several of the other high mountains on the Dividing Range are capped with Tertiary basalt. This great coast-range was greatly disturbed by basaltic eruptions during the Tertiary period. Victoria, especially in the south-western portion, was the scene of great volcanic activity. No less than seventy-nine extinct points of eruption occur there. Some of these are cone-shaped hills with crater basins, and are built up of basaltic lava, *scoria* and ashes, and from them large flows of lava have spread over the country for many miles around. There are no recent volcanoes in Australia; in New Zealand, however, most interesting volcanic agencies are active at the present day.

It would be impossible in this brief description of the geology of Australasia to give due mention of the work of those men of science who have contributed to the achievement of the present knowledge of the subject. Dampier, in 1688, wrote of the western coast of Australia—"the land is of a dry, sandy soil, except you make wells;" and most of the early explorers made only similar allusions to the rocks observed by them. Nor is this superficial opinion to be wondered at, considering that the science of geology is but one hundred years old.

But our knowledge of Australasian geology upon a systematic basis is due chiefly to the labours of Darwin, Strzelecki, Rev. H. B. Clarke (who has been called "the Nestor among Australian workers in the field of natural science"), Jukes, Dana, Stutchbury, Selwyn, Daintree, Aplin, Gould, Haast, Hochstetter, Gregory, Hardman, Tennison-Woods, Denton, and many others still engaged upon the Geological Surveys in the different colonies.

CLIMATE AND RAIN-FALL.

TO the physical geographer, Australia presents conditions quite different from those of the Northern Hemisphere. Compared with other countries it is not an island, for it has an area equal to that of the United States, and nearly equal to that of Europe; and it is not a continent, for it is surrounded with water; and in some old books it is still "a fifth quarter of the globe." It lies in mid-ocean, as far from other continents as it can be, its eastern coast being exactly midway between the Cape of Good Hope and Chili. It extends in longitude for 2,400 miles, and in latitude it extends from 10° to 40° south latitude—a range which affords space for every climate except that of extreme cold. With its 7,000 miles of coast-line, those who sent out the first colony had a large choice, and it is a curious fate that the nation whose progress depended upon coal, should, all unconscious of the fact, send the founders of Australia to the centre of the greatest coal-field in the Southern Hemisphere. Later on, another pioneer party went to Western Australia; a third to South Australia; and then the parent colony split up into three—namely, Victoria, Queensland and New South Wales, making five colonies of the whole of Australia; of these, the areas, avoiding fractions, are as follows—Victoria, 90,000 square miles; New South Wales, 310,000 square miles; Queensland, 670,000 square miles; South Australia, 904,000 square miles; Western Australia, 976,000 square miles; making

a total of 2,950,000 square miles. The boundaries of these colonies, with the exception of that between Victoria and New South Wales, are not natural features, but lines of latitude and longitude; and it would be impossible to have it otherwise, owing to the almost total absence of extensive natural features suitable for such divisions in the interior; for the great and continuous mountain ranges are all near the coast, and almost the only extensive river-system is within the limits of New South Wales.

The mountain chain on the east coast is the most extensive, and in it is the highest land in Australia. Its solitary snow-capped peak, near the south-east corner of the main-land—namely, Mount Kosciusko—is 7,351 feet high, and forms a starting-point, whence the range extends southwards to Wilson's Promontory, and northwards with scarcely a break to Cape York, in all, about 1,900 miles. It is in but few places more than fifty miles from the coast, and rises abruptly on the sea-side to from 3,000 to 4,000 feet, and in a few isolated peaks, other than the Kosciusko Range, to 6,000 feet. Down its steep eastern slopes, on which abundant rain falls, run many valuable rivers, and on its western slopes is the only river-system in the interior of Australia; but the extremely gradual descent on the west gives a character to those rivers marked by sluggishness and absence of volume. As an illustration of the gradual descent, it may be stated that the town of Bathurst is 2,200 feet above the sea, and Dubbo, which is 100 miles in a straight line down the descent, 865 feet, which shows a descent of $13\frac{1}{2}$ feet per mile. Bourke is 200 miles still farther down the descent, and is 456 feet above the sea, the fall in this section being at the rate of 2 feet per mile; and Wilcannia, 180 miles still farther down the slope, is 126 feet lower, showing a fall of 8 inches to the mile; but it is by river 535 miles from Bourke to Wilcannia, so that the river falls only 3 inches per mile; hence, these rivers are very sluggish in their movements, and a heavy fall of rain takes a long time to drain off—a condition which makes the River after rain navigable for a longer period than it otherwise would be. The Darling is navigable to Walgett, which is 2,345 miles by river from the sea. Its numerous tributaries have so far not been made use of for navigation,—indeed, they are not very suitable for it, although they are of considerable extent, for, omitting smaller ones, the Macquarie is 750 miles long; the Namoi, 600; the Barwon, 450; the Gwydir, 445; the Mackintyre, 350; and the Culgoa, 950. These all diverge from the main stream, a short distance above Bourke, in latitude 30° , and spread out like the branches of a tree towards the Main Range, and receive the whole of its western drainage from latitude 24° to 34° . The average rain-fall at Bourke is 18 inches, thence easterly it gradually increases, and along the mountains is from 30 to 40 inches. But rain is the only source of water for this river-system, there being no snow, or at most only an occasional and slight fall in winter, and, therefore, whenever the rain fails all these rivers cease running.

The other great branch of the River, the Murray, takes its rise in the Kosciusko Range, and is the only snow-fed river in Australia, and judged by the volume of its water, it is a much finer river than the Darling, but it is not so long and drains a much smaller area; it is navigable to Albury, 1,703 miles from its mouth, and one of its tributaries, the Murrumbidgee, is navigable to Wagga Wagga, a distance of 500 miles, and has a total length of 1,350 miles. Another, the Lachlan, is 700 miles, and the

Goulburn, 400 miles long. Owing to the melting of the snow on the Australian Alps, the River is always in flood in the spring, but it seldom overflows its banks.

Since the Darling depends solely upon rain, it may be asked, how long is it navigable in each year? The records for the past ten years show that it is navigable on the average four months in each year, but at times a whole year passes during which it is not navigable. But it must be borne in mind that during these ten years nothing was done to help natural conditions, by conserving water and turning it into the River when it was wanted. Natural facilities exist in abundance for such conservation, and as population increases, great improvements in the condition of the River in regard to navigation will doubtless be made.

From the great coast range on the west side of Australia, which presents such a bold outline of granite to the sea, many fine coast-rivers fall into the Indian Ocean, but towards the interior no stream worthy of the name of a river has yet been found running. Nor is it likely that they will be found, for meteorological laws tell us that the rain-bearing winds will be drained of their moisture by the mountains, and be dry winds beyond the range, while there



ONE OF THE TELESCOPES IN THE SYDNEY OBSERVATORY.

is no return wind from the interior to make rain, as there is on the mountains of the east coast. Nor is the west coast-range so high as that on the east coast; it seldom rises above 3,000 feet, and is generally not more than 2,000. On the east, north and west coasts of Australia are many navigable rivers and numerous smaller ones, but all the southern coast for 1,800 miles has not a river flowing into the sea, except one, and that one, the Murray, does not belong to it, but derives its waters from the east coast-range. The rain-fall of the south coast is small (about 20 inches), but not sufficiently so to account for the total absence of rivers, and it would appear that the soil is very porous, and lets the rain down to a lower level, where it is found in quantity, making

its way to the ocean. The comparative abundance of rain on the east coast-range is due to the situation of the high land with reference to the direction of the rain-bearing winds, many of which come from the tropics and travel in an easterly or south-easterly direction over Australia, and, as they rise over the mountains, are compelled to deposit their moisture by the elevation they have to make in getting over.

Up to the present time little or nothing has been done by the Colonial Governments to conserve water, except for towns and stock, but abundant evidence has been collected to show that so soon as the natural facilities for irrigation are made use of, the colonies will be enormously enriched by a greatly extended agriculture; for the western slopes of the Main Range on the east coast, with their ample rain-fall and numerous half-formed natural reservoirs, wait only the magic touch of the engineer to convert them into valuable farm-lands.

How far subterranean water may be available for irrigation and other purposes, is a question that is being slowly answered in the various colonies by sinking wells, and the answer, so far as it goes, is exceedingly encouraging. Very many wells yield an abundant supply of artesian water; the last finished at a depth of 1,073 feet, is in the Bourke District, and yields 350,000 gallons per day. The study of the rain and river statistics for the Darling River shows that it carries off less than one per cent. of the rain-fall, taking the average over eight years, and that, therefore, there must be enormous quantities of water passing through the porous *strata* into under-ground drains to feed these artesian wells; and measures of one of the rivers—the Macquarie—show that its bed is porous in this way to a very unusual extent, and that it allows the water, which finds its way into it from the hills, to sink rapidly down. The deepest well yet made is near the centre of Australia, and is 1,220 feet deep.

The simplest and least expensive system of conserving water has been in use for years in large areas which have neither rivers nor other natural surface-water. This is the construction of tanks, or artificial hollows, in places suitable to collect the rain-water which runs off the surface, and experience shows that if these are made fifteen or twenty feet deep, they will conserve sufficient water for cattle and sheep through the worst drought, even when they are not covered in to prevent evaporation.

In the existing water-courses and lakes are to be found abundant proof that at a time long past the rain-fall was enormously greater than it is in the present day. At that time, in all probability, the great east coast-range was very much higher than it is now, and was one of the causes of that greater rain-fall, but those very rains which it helped to produce, gradually cut away its elevation by denudation, and destroyed its power of rain-making, but rain-records do not go back to that extremely remote period when rain was so abundant. Within the last twenty years, rain observers, encouraged by the astronomers in the colonies, are springing up in all directions, and from their combined labours we have statistics showing the rain-fall of the whole of the coast, except the extreme north-west, and of a considerable portion of the interior, and we have the records from a few places on the overland telegraph line in the very heart of Australia. These records show that the average rain-fall of the colonies is as follows:—South Australia, 20 inches; Victoria, 32 inches; New South Wales, 25 inches; Queensland, 27 inches; Western Australia, 23 inches; a few observations taken at intervals in the central

parts indicate a probable fall of 10 inches. Bearing in mind the relative areas of the colonies, these figures give a mean rain-fall for the whole of Australia of 21 inches. For the whole of Europe it is $15\frac{1}{2}$ inches; United Kingdom, 30 inches; France, 27 inches; Germany, 32 inches; Russia, $14\frac{1}{2}$ inches; Austria, 16 inches; Spain and Portugal, 14 inches; Italy, 34 inches.

In a country of such great extent and varied natural features, every variety of climate may readily be found, but for any one looking at the question with a view to using these varieties for health, they become reduced to those which have been made available by settlement; for it must not be forgotten that but a very small part of Australia is inhabited,

at least in such a way as a health-seeker requires. Generally, Australia, both on the coast and inland, is very much cooler than corresponding latitudes in Europe. In many cases there is a difference of 10° of temperature in favour of Australia, and the snow limit is fully 1,000 feet lower than it is in Europe, and since a degree of temperature is very nearly equal to a change of one degree



THE TRANSIT TELESCOPE IN THE MELBOURNE OBSERVATORY.

of latitude, it is equivalent to putting Australia, or at least parts of it, 10° farther from the equator. We may illustrate this by a few figures. Perth, in Western Australia, has a mean shade temperature of 64° , and its latitude is 34° . Algiers which is in latitude $36^{\circ} 47'$, nearly 3 degrees nearer to the pole, is still as hot as Perth. The mean shade temperature at Adelaide is $63^{\circ}.1$, and its latitude $34^{\circ} 55'$, while Barcelona, in Spain, which is $6\frac{1}{2}$ degrees nearer the pole, has yet a temperature of $62^{\circ}.5$. Melbourne has a mean shade temperature of $57^{\circ}.5$, and latitude $37^{\circ} 50'$; Madrid, $2\frac{1}{2}$ degrees nearer the pole, a mean shade temperature of $57^{\circ}.6$. Sydney has a mean shade temperature of $62^{\circ}.5$, and latitude $33^{\circ} 52'$; Toulon, which is $9\frac{1}{2}$ degrees nearer the pole, a mean shade temperature of $62^{\circ}.3$. Brisbane has a mean shade temperature of $70^{\circ}.8$, and is in latitude $27^{\circ} 27'$, and Alexandria, which is $4\frac{1}{2}$ degrees nearer the pole, has a mean temperature of $70^{\circ}.6$. In fact, if Australia were placed by its latitude over Europe and Africa it would extend from Abyssinia in Egypt to the southern parts of France, but if placed by the temperature of its inhabited towns would cover all Europe to the latitude of Edinburgh. Large areas in Victoria and the southern districts of New South Wales have the same temperature as the southern counties of England; this is in part accounted for by the fact that they

are elevated lands, but not wholly so, for the temperature of all Australia is lower, as shewn above, than would be expected from the latitude. The cause of this is, no doubt, the greater extent of ocean in the South, which does not become so heated as the land in the Northern Hemisphere, and also to the free circulation of great ocean currents from the Southern Ocean. It must be remembered that the towns mentioned are all on the sea-coast, and therefore have a humid atmosphere, especially those on the east coast, but all of them are within from three to five hours' travelling of a much cooler and drier atmosphere on the mountains, at places where invalids can find, to a greater or less extent, the surroundings of civilization. The mountains near Sydney are generally admitted to be excellent in this respect; and for natural advantages in chest diseases there can be no doubt that, in Queensland, Toowoomba is the best available position in that colony; here the mean temperature is $62^{\circ}.4$, but it is rather cold in winter, the temperature at times falling to 30° —about 8° lower than Sydney,—and in summer rising to 101° , but its elevation—1,960 feet—and situation make the air particularly good for invalids, and the climate is dry, having the humidity on the average of 72° ; at Mount Victoria, about 80 miles west of Sydney, the mean shade temperature is $55^{\circ}.6$, the lowest $26^{\circ}.7$, and the highest 100° ; the elevation is 3,490 feet.

The tides in Australia present some interesting peculiarities. At Perth, for instance, in Western Australia, and thence south to Cape Leeuwin, they have no regular tides; once a day generally the water rises two or three feet and falls again, but the state of the wind seems to be the great factor in the state of the tide. At King George's Sound we find regular tides, the springs rising four feet, and the higher tide being at 10 h. after full moon; at Adelaide the time is 4.30 and the rise eight feet, but with a strong westerly wind setting into Spencer's Gulf the rise is greater, and has been known to reach 12 feet. At Portland the time is 12 h., and the rise is 4 feet, but tides are uncertain, and in winter with east-south-east wind there is seldom more than one tide in a day. In the Yarra River at Melbourne, the time is 2 h. 48 m., and the rise 2 feet 8 inches; while at Port Dalrymple, north coast of Tasmania, the tide rises 10 feet, and the time is 12 h. 5 m.; at Hobart the time approximates to that of the east coast of Australia, along which the great tidal wave arrives from the eastward about the same hour; Jervis Bay time is 8 h. 20 m., rise 9 feet; at Fort Denison, Sydney Harbour, the time 8 h. 30 m., and the rise 7 feet; Newcastle, 9 h. and 7 feet; Port Stephens, 9 h. and 6 feet; Moreton Bay, 9 h. 3 m., and 7 feet; at Rockhampton, 9 h. 4 m., and 15 feet; at Cape York, 11 h. 15 m., and 10 feet; on the east side of the Gulf of Carpentaria the time is from 7 to 8 h., and the rise about 12 feet. At the head of the Gulf there is but one tide in each day, and that of a very complex character; the rise is about 12 feet. On the west side of the Gulf, times are from 7 h. to 9 h., and the rise 5 to 8 feet; at Port Essington we begin to get into the most remarkable tidal district of Australia; from this point going westward the tides are very great, in places rising 38 feet, and consequently most dangerous currents are set up. Captain Stokes reported a current of eight knots an hour at Cove Bay, not far from the Fitzroy River; and at Hanover Bay, the same authority makes the highest tide 38 feet, and the hour 11 h. 30 m. At Port Darwin the extreme rise is 24 feet; at Roebuck Bay, the point at which the cable lands, the time is 12 h. 30 m., and the rise is 30 feet, thence westward round

the coast the tides become rapidly smaller, and at the extreme western point, Freycinet Reach, the rise is only 4 feet, and the time 12 h. Thence to Swan River the tides are small and uncertain.

The moon in the course of her revolutions round the earth during 18 years and 10 days, is eclipsed wholly or in part 29 times, and intervenes between the earth and the sun 41 times, making as many eclipses of the sun, partial or complete. The best points from which to observe the phenomena of these eclipses are scattered evenly over the Northern and Southern Hemispheres, and hence Australia often affords the local as well as the foreign observer convenient vantage ground for observation; so also the favourable localities on the eastern coast for observing the transit of Venus, in 1874 and 1882, were taken advantage of by many observers, and their successful observations could not be used until the exact longitude of Australia was known, and this led to its final determination by means of electric signals.

The history of the Sydney Observatory is inseparably connected with that of Parramatta, the first public observatory ever erected in the Southern Hemisphere. Sir Thomas Brisbane arrived at Parramatta in November, 1821, and by the end of April, 1822, the building for the Observatory was finished, and the instruments mounted; work was begun on the 2nd day of May, and the work done there was rewarded with four gold medals and other smaller honours. In 1848, the Observatory was dismantled, and the instruments stored in Sydney. After a long correspondence with the Home Government, it was finally decided to give the Parramatta instruments to the colony, upon condition that the colony established an observatory, and gave regular time-signals for the use of the shipping. Just at this time, Sir William Denison arrived in the colony, and he, being an enthusiastic astronomer, took the matter up, and induced the Government to vote £7,000 for the building and instruments, and to obtain an astronomer from England, leaving the selection to the Astronomer Royal. The Parramatta instruments given by the Home Government, cost them £1,650. Some of these were sent to England for repairs, and in 1856, the present buildings, excepting only the north wing, were begun, the site being chosen from its suitability for a time-ball. The same year, the Rev. William Scott arrived, and spent the time which was occupied in putting up the building in travelling over the country and establishing twelve first-class meteorological stations. In the end of 1858, Mr. Scott came into residence, and work was begun; by the end of 1862 he found that the work would be too much for his health, and he resigned. Mr. H. C. Russell, the present Astronomer, had charge for eighteen months, and the second Astronomer, Mr. George Roberts Smalley, arrived in the colony from England in 1864. He induced the Government to begin a trigonometrical survey of the colony, but died in 1870, before any progress had been made with the work, and Mr. Russell was then appointed Astronomer. Mr. Scott was a vigorous observer, and published several volumes of astronomical and meteorological works. Mr. Smalley's publications were confined to a few meteorological papers.

Mr. Russell has published a number of astronomical works, and the Annual Meteorological Reports, and since 1878 a special report every year upon the rain-fall. Since 1871, the Observatory has been entirely remodelled, and new and larger instruments introduced; the equatorial refractor has an aperture of $11\frac{1}{2}$ inches, and is the

largest in Australia; very perfect self-recording instruments are quite a feature at the Observatory. Similar instruments are being gradually distributed to selected stations inland. Since 1878, a weather-chart has been published daily, and daily weather-telegrams are now received from all the colonies of Australasia, and combined in the weather-chart. The time-ball service has been kept up since 1858. A similar time-ball



THE MOON.

From a Photograph by Mr. R. L. J. Ellery, of the Melbourne Observatory.

was established in Newcastle in 1871, and time-signals are sent every day all over the colony. Rain observations are regularly made at 866 places, and complete meteorological observations at a number of carefully selected stations.

The Melbourne Observatory was first established at Williamstown, with the object of giving time-signals to the shipping, and rating chronometers. Mr. R. L. J. Ellery, the present Astronomer, was appointed

to organize and manage it, and instruments suitable to the proposed work were erected, but the colony was making such rapid strides that it soon became necessary to start a trigonometrical survey, and Mr. Ellery was appointed to direct it in connection with the Observatory. This called for better instruments, and a long series of observations to determine the exact position of the transit instrument, the initial point of the survey. In 1863 the Observatory was removed from Williamstown to the Domain surrounding Government House, and Mr. Ellery then took charge of the meteorological work as well; this had been previously done by Dr. Neumeyer. By the cordial assistance of Sir Henry Barkly, the Governor, and Sir George Verdon, the Colonial Treasurer, liberal grants of money were made, and the Observatory furnished with all necessary instruments of first-class quality; and to these were added, in 1869, the great reflector, which has a mirror 4 feet in diameter, and cost altogether nearly £10,000. The work of the Observatory has been principally astronomical, and several volumes of star observations, many extra-meridional observations, and a volume of the work done with the great reflector have been published; this last records the work done upon Southern *Nebulae*. Some of the best photographs of the moon have been obtained with the great reflector, and regular photographs of the sun are taken with the photo-heliograph. Time-signals are distributed daily, and the old time-ball at Williamstown is still dropped, as it is in the most convenient place for shipping. Self-registering meteorological and magnetical instruments are constantly at work in the Observatory and regular observations

are taken at a great number of carefully selected stations, and the results tabulated and published. A daily weather-chart is also published, which combines the telegrams from all the colonies—telegrams which the several colonies interchange for public information.

In Queensland, the formation of an observatory has been commenced only recently. In January, 1887, Mr. Clement L. Wragge, Government Meteorologist, was appointed, and under his energetic supervision the Observatory is becoming rapidly furnished with meteorological standard instruments—with instruments for recording automatically barometer, wind, temperature, etc.,—and observing stations are being established in the interior of the colony for general meteorological purposes; and for daily weather-marking, during 1887, a daily weather-map was commenced, which shows the weather in all the colonies of Australasia. The Observatory contains also a 4½-inch equatorial instrument by Ross, of London, also a transit instrument, clocks, chronographs, etc., and it is anticipated that a suitable building will soon be erected for it near the present site on Wind-mill Hill.

In Adelaide, meteorological observations were begun in 1839, by Sir George S. Kingston, and carried on without interruption for more than forty years. More recently, a Government meteorological observatory was started under the superintendence of Mr. C. Todd, Postmaster-General, and gradually the observing stations have been established at a great number of places in the southern part of the colony; and, in 1874, all the overland telegraph stations were made observing stations. In 1874, advantage was taken of the transit of Venus to get a large equatorial, with 8-inch object glass, and other valuable astronomical instruments. A fine observatory was built, in the park-land on the west side of the city, to receive this, together with various first-class recording instruments for the completion of the set of meteorological instruments. More recently, a high-class meridian circle, with 6-inch telescope and all the more recent improvements, has been added, completing the outfit of a first-class observatory. From the daily meteorological observations, and the telegrams from the other colonies, a daily weather-chart is published, showing the weather conditions in Australia generally. The meteorological and astronomical observations have been published in a number of handy volumes issued by the Government.

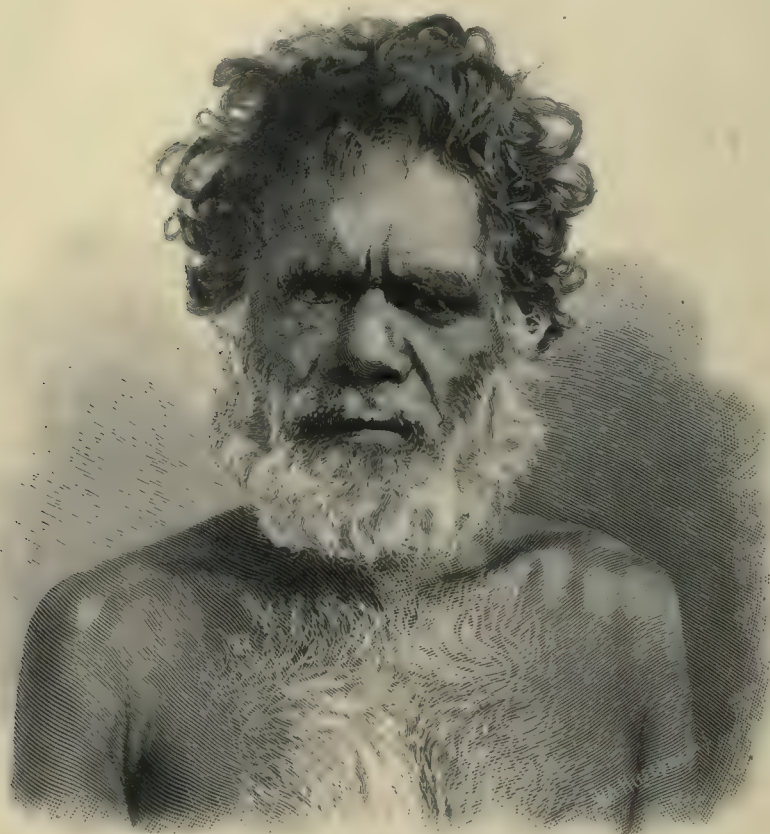
THE AUSTRALIAN ABORIGINES.

THE first discoverers of Australia who landed on its shores found the country sparsely inhabited by roving bands of nomad hunters, whom ethnologists have found it impossible to class with any one of the ascertained stocks of the human race. Every classification proposed has difficulties in its way so great that some writers have been inclined to look upon the Australians as a distinct race. We are not, however, limited to this conclusion; and the probable solution of the difficulty may be found in the theory that the Tasmanians represented the primitive inhabitants of Australia, who on the Continent were partly exterminated, and partly absorbed, by the invading ancestors of the present aborigines. It is probable that these invaders spread over the country from the northern or north-western shores of the Continent, along three well-marked lines of advance, to its southern coast; but it is evident that they did not reach Tasmania. Whence they came it is impossible to say with any degree of certainty; but if,

as Professor Huxley suggests, their analogues are to be looked for among the hill tribes of the Deccan, it is easy to perceive how successful invaders of that type, slaying most of the males, and appropriating the females of frizzly-haired autochtones of the Melanesian stock, would in time produce a type such as that which is found among the Australian aborigines of the present day.

Of the languages spoken by these tribes there is but little to be said. There is no doubt that they are all variations of one stock; they all appear to have a common grammatical structure, and the same words re-appear at great geographical distances,

though lost in the intervening country. With what family of languages the Australians are connected is not yet settled by philologists, but it is certain that they have little or no connection with that to which the Malay, Polynesian, and Melanesian belong. Dr. Bleek, whose reputation gives weight to his opinion, believes them to be nearly allied to the languages of south-eastern Africa. In stature the Australian natives come nearly up to the average height of Europeans; but their limbs appear to be deficient in muscle, this defect being especially perceptible in the calves of the legs. The whole body seems



A MALE ABORIGINAL.

to be built for activity rather than for muscular strength, and is often remarkably hairy, even in the case of females. The colour is not black, but a dark chocolate brown. The lips are prominent, the nose large, with spreading nostrils, and the eyes are deep set under massive over-hanging brows, the white of the eye having a brownish tinge. The men are full bearded, and the hair of the head is thick, curly, and black, as a general rule, though occasionally inclining to be straight, and in some cases approaching frizzle. The members of a well-known family in a Queensland tribe, referred to by Baron Maclay, are completely hairless, but these present no more than a *lusus naturæ*.

Differences of language and custom, and especially the various words used for "Man," divide the aboriginal tribes into certain groups, to which, for the sake of convenience, the term "Nations" may be applied. Each of these calls its own members "Men," and designates aliens by a term of scornful depreciation. In these nations each tribe has also a local designation, often derived from the word used as a negative—*e.g.*: the *Kamilaroi* or *Kumilrai*—the people who say *Kamil* or *Kumil* for "No." Extending throughout all these nations, a well-defined organization exists, on which the social

regulations are based. The natives of any given community are divided into two or more "classes," which have *connubium* one with the other. These are subdivided into smaller divisions, distinguished by totems; and the general rule is that a male of one division must marry a female of another division. In other words the divisions are exogamous. The natives are also divided into geographical divisions, which we may call "hordes." To each horde belong certain hunting-grounds with definite boundaries, and trespass within them is equivalent to an act of war. Marriage is arranged in various ways, custom in this as in other matters differing so widely, that it is impossible to generalize from the practice of any particular tribe. When a child is born, the first question raised concerning it often is if it shall be allowed to live. If the mother has another child of tender years requiring her attention, or if, for other reasons, the new born babe is judged to have come in an inconvenient season, it may be smothered in sand or ashes, or abandoned by its parents, who remove and leave it to die in the empty encampment. But if the infant be permitted to live, it is well cared for, and both father and mother exhibit the most tender affection towards their offspring. Children are treated with the



A FEMALE ABORIGINAL.

greatest indulgence, and their death is the occasion of bitter grief to parents and relatives.

Circumcision is practised; but it is a singular fact, for which no explanation can be offered, that it is, speaking generally, a characteristic of the western tribes, as distinguished from those on the eastern side of the Continent. Some of these, however, inflict upon a number of their males, selected by the elders, a most extraordinary operation which cannot here be described. Until the youth reaches the age of puberty he is under the care of his mother, and ranks with the children; but at or about that age he is taken away from her by the solemn ceremony of initiation, which separates him from the children of the community, and ranks him among the men. This ceremony, as far as has been hitherto ascertained, is common to all tribes, with some exceptions in the southern parts of Australia, and even they have easily recognized survivals of it. After the completion of the ceremonies, the youth is released from his mother's control, and is sent out into the forests, where he remains by himself for a considerable period, and has to maintain himself by hunting. After some further probation, he is permitted to marry and to take his seat in the councils of his people.

It has already been stated that an Australian community is divided into hordes, each of which has certain definite hunting-grounds, but it must not be supposed that all the members of a horde remain together in their every-day life. The horde splits up into small parties, which go out in various directions, wandering hither and thither over the common hunting-grounds, and moving their encampments as convenience may dictate. The huts are roughly constructed of sheets of bark, and are open at one side, before which a small fire is kept burning. But these temporary dwellings are not the real Australian huts of the days before the white men came into the land. These were built of bent sticks, neatly thatched with grass tussocks by the women, and were comparatively comfortable and weather-proof structures. The introduction of the iron tomahawk, which supplanted the stone hatchet, and made it easy to strip the bark from the forest trees, has led to the abandonment of the old huts, and affords a curious instance of deterioration instead of improvement, caused by the introduction of a superior implement. In a large part of Central Australia no bark is used, small beehive-shaped huts being constructed of sticks and grass. While the men are away in pursuit of game, the women are fully occupied in gathering edible roots, seeds and fruits, or in weaving bags, net-making, etc. They also catch fish with the hand-nets. Spearing fish, however, is one of the duties peculiarly the work of the men.

The natives eat almost everything they catch that has animal life, from kangaroos down to snakes, frogs, grubmants and their eggs, and even the game which is found in those well-stocked preserves, the hair of the blackfellow's head. One of the most widely spread food-plants is the *Dura* (*Typha angustifolia*), the rhizomas of which are collected by the women and baked in the ashes, as also the heart of the tree-fern (*Dicksonia antarctica*), the wild yam (*Dioscorea transversa*), and the tap-root of the Kurrajong (*Brachychiton populneum*). In Central Australia the chief vegetable food is the *Portulacca oleracea*. The plant is eaten raw, the root is roasted, and the oily seeds are ground into a coarse meal between two stones, and either made into a kind of porridge, or into cakes, which are baked in the hot ashes, like the white man's "damper." The *Nardoo*, properly *Ngardu* (*Marsilea Drummondii*), on which Burke and Wills of the Victorian Exploring Expedition starved to death, is extensively used in default of better food. The wild rice (*Oriza sativa*) is gathered by the women in the districts where it is found, as also are certain kinds of grass-seeds, especially the *Sporobolus actinocladius*. Among the food-plants must be mentioned the Bunya-Bunya pine (*Araucaria Bidwelli*) though it is found only in one part of the Moreton Bay District, and yields a plentiful crop of its cones once only in three years. The seeds contained in its cones are highly esteemed by the aborigines, who come in great numbers, from distances of two or three hundred miles, every third year to feast upon them. A complete list of all the food-plants would fill an entire volume, and it must suffice to say that the natives consume everything edible within their reach, whether animal or vegetable. The *Pitcheri* (*Dubosisia Hopwoodii*), though it cannot strictly speaking be called food, is found only in a district which may be roughly defined as west of Eyre's Creek, north of Lake Eyre, and east of the transcontinental telegraph line; it is carried in a dried state for several hundred miles from its habitat, and exchanged as an article of barter with other tribes that have not the plant. The natives are extravagantly fond

of it. They chew it into a "quid," about the size and shape of a silk-worm's cocoon, and carry it with them in that state behind the ear, producing it as a delicate attention to acquaintances, or a friendly offering to a stranger. Its effect is that of a narcotic stimulant.

The government of the Australian aborigines may be said to be in the hands of the old men. Great reverence is paid to old age, and in some tribes a youth, in addressing a gray-beard, will crouch down, and deliver his message in reverential tones. Among the elders, certain men are distinguished above their fellows for wisdom, valour, ability, and above all for magic power. These are the most influential members of the community. They form the Great Council which arranges all the most important affairs of the tribe, and one of them generally takes precedence of the rest. His position, however, depends upon age and personal influence, and is not



A BLACK GIN AND HER CHILD.

From a Photograph by J. Lindt

transmitted by inheritance. When it is necessary to gather together the whole community—as in the Initiation Ceremony—or when a Great Council is to be held, runners are sent out by the principal Headmen, who go from horde to horde carrying with them a "message-stick," or some other token indicative of their message. These are recognized as heralds whose persons are sacred even in time of war, while they are discharging their functions as messengers. It is at these assemblies that the Greater Corrobborees, or ceremonial dances, are performed by the men, to the accompaniment of monotonous songs set to a quick movement, the women beating time meanwhile by drumming upon their tightly-rolled opossum rugs.

The normal relations of one Australian tribe to another may be said to be those

of almost continual hostility. The members of each community call themselves "Men," while they designate those of other communities by terms of contempt, corresponding to the Greek *Bár Baroi*. They make raids upon them for the purpose of killing their men and stealing their women; and they suffer from like raids by the enemy in return. In these wars with alien enemies no notice is given, and no mercy is shown to males, excepting that boys are sometimes, though rarely, spared by the victors, and adopted into their community. There is no need to declare war against the alien enemies. Their very existence is a continual offence, and they are to be blotted out of existence whenever occasion serves. There is also a considerable amount of fighting within the community, and there are many continued blood feuds. One horde steals women from another horde, or gives other cause of offence, such as a supposed causing of death by witchcraft, and these quarrels may be settled by a pitched battle between the hordes or between the "totems," according to mutual agreement. There is, however, a marked difference between these set fights and the raids upon the alien enemies. Due notice is given. The two parties meet in open field; and when they have rated one another after the fashion of Homer's heroes, the battle is joined. Sometimes even the women come into the fight, and not infrequently lose their lives in the fray. Many of the tribes are cannibals, eating at least a portion of the slain. But as a general rule, they do not eat those of their own community who fall in the pre-arranged battles of the hordes. This crowning insult is generally reserved for the alien enemy. This kind of cannibalism, however, must be distinguished from that practised by some of the tribes, who eat their deceased relatives, especially the omentum fat, as a touching funeral ceremony to prevent excessive grief. Captive women, whether taken from the aliens or from a horde within the community, cannot be the property of their captors unless they belong to one of the divisions with which their captors may legally intermarry.

The blackfellow's familiarity with bush-life, and his wonderful mastery of the bushman's art in every particular, have made his services useful to Europeans in several capacities. The habits of the black races of Australia are against any long-continued exertion in any direction, but where the work required of the black happens to bring his peculiar gifts into play his usefulness is unquestionable. He distinguishes himself chiefly as a "tracker" of persons or cattle who may happen to be lost in the bush. In tracing criminals, and finding lost travellers and children, the black tracker has often evinced a marvellous instinct, which has taken the police, or the rescue party, direct to the spot required, when every other method had proved itself at fault. Traces are apparent to the eye of the tracker when to even the experienced station-hand no track or indication whatever is discernible; and a mounted black will often follow the trail at a rapid trot long after it has been lost by skilled bush-men of the search party. For this reason the black tracker is a necessary member of the police force of the colonies, though his services are not so often required now as they were in former years.

The chief articles of manufacture are the weapons of war, many of which are cut of hard, close-grained wood, and the only tools available to fashion them, before the introduction of iron by the white settlers, were the stone hatchet and the flint, or shell, knife and scraper. Weapons and other articles, such as bowls, and fish-hooks made of bone or hard-wood, are the work of the men; but the women also make nets, opossum

rugs, etc., as well as baskets and bags, some of which are really elegant productions. The following is a list of the weapons generally used:—There are two kinds of spear, from six to ten feet long, commonly known as the jag-spear and the reed-spear. The jag-spear is made of black-wood (*Acacia melanoxylon*), or some other hard-wood, with barbs or jags, cut out of the solid wood along its piercing end. The barbs may also be formed by fixing small flints, or the tail bones of the sting-ray, along the point with gum from the wattle, or other gum-bearing trees, mixed with burnt shell-lime. Some of these spears are much heavier than others, and are used chiefly for thrusting at close quarters, though they are also thrown by the hand at short distances. The second kind is a much lighter spear, with a handle of reed, and a smooth point of wood hardened by fire. It is used only for casting at a distance, and is thrown by a curious instrument known among the white men as the *womera*, though this is merely a local word. The *womera*, or “throwing-stick,” is a narrow flat piece of wood, generally about two feet or two and a half feet long, having a hook at one end. The warrior holds it in his right hand, while with the left he grasps his shield and spears, the latter being held about three or four feet from the butt,



AN ABORIGINAL WARRIOR.

with the points behind him. In the end of the butt there is a small hollow into which he fixes the hook of his throwing-stick, draws forth his spear, and raises it into position for throwing. He grasps the *womera* firmly with his hand, steadying the spear upon it by a light finger touch, and throws it, not from his hand, but from the hook of his throwing-stick. This spear is used both for hunting and for war, and is a deadly weapon at fifty-or sixty yards. Barbs are sometimes attached to it as well as to the jag-spear.

For close fighting, besides the jag-spear already described, there are clubs of various kinds, usually from two to three feet in length, some of these are headed by heavy rounded knobs, while others are curved at the end. There is also a curved

weapon, about two feet long from the handle end to the beginning of the curve. The curve is sometimes very sharp, almost approaching an obtuse angle; and the end of it, with the under part of the curve, is thinned down to a cutting edge. The stroke is delivered, if possible, with the sharpened end. A somewhat similar weapon, found in Central Australia, is of much greater length, extending to four or five feet in the handle, and is used like a broadsword. Another dangerous weapon at close quarters is a broad flint with a sharp cutting edge, set in a lump of gum. This is held in the hand and inflicts ghastly wounds on the naked combatants. For defence there are two shields. One is a light shield made of thick bark or light wood cut from the bend of a large limb, in shape a pointed oval, from two to three feet long, and seven inches to about one foot to eighteen inches broad in its widest part. This is used to ward off spears and other missiles, and is held so as to turn them aside rather than to receive them in full front. It is not calculated to endure the direct impact of the spear. Thus received, a well-thrown spear would pierce the shield, and in known instances both the shield and the hand that held it have been transfixed. The other shield is about the same length, but much thicker, heavier and narrower. It is cut out of a solid block of very tough wood, which is not easily split, and is used as a defence against club strokes, etc., in close fighting. Some of the tribes are said to use no shields.

The Australian canoe is, with slight variations, every-where built on the same general plan, excepting on the north or north-east coast, where it has acquired an outrigger. An inferior sort, for merely temporary purposes, is made from a sheet of red-gum bark, taken, if possible, from a bend in the tree-trunk to give it an upward turn at the ends. If a bent sheet be not easily procurable, a straight one may be used, forming a mere hollow cylinder open at the top, the ends being stopped by a lump of clay, or tenacious mud, to keep the water out. The sort of canoe most generally used is made as follows:—A sheet of bark is stripped from a clean straight bole of one of the trees of the stringy-bark group, for instance, *Eucalyptus Piperita*, *E. Capitellata*, *E. Macro-rhyncha*, *E. Obliqua* (Messmate), or *E. Sieberiana* (Mountain Ash), etc. The bark when thoroughly loosened is carefully lowered to the ground, and all the rough dry outer integument is chipped off. With these chips, and dry twigs and leaves, a fire is made under the sheet of bark, which is laid on the ground. When the bark is heated and steamed, so as to be quite flexible, and to bend any way without cracking, it is turned inside out, and tied with strings. The ends are chipped quite thin, and are then folded together and tightly bound with strips of the inner layer of bark. Stretchers are now put in under the middle ties, and the canoe is complete. The blackfellow, standing erect, propels his canoe by punting with a long pole, a skillful operation, or he may use the pole as a paddle. Sometimes he squats in the bottom of the canoe, and paddles with a small piece of bark in each hand. Another kind of canoe is made on the same plan, but of three sheets of bark, one for the bottom, and one for each side. The sheets are neatly sewn together, and wooden paddles three or four feet long are used. In these frail vessels, the coast folk will go out to a considerable distance, even in a rough sea-way. The canoes are from six feet to fifteen feet in length, and about two feet to thirty inches from gunwale to gunwale amidships.

The Australian savage has no conception of any cause of death other than violence,

accident, or witchcraft. If sickness come upon him it never occurs to him to attribute it to natural causes. An enemy has bewitched him, and he must seek a counter spell to overpower that under which he is suffering. If this be not effectual it is evident that the hostile spell is too powerful to be overcome, and he sets himself to discover who has cast it upon him. The discovery may be made in a dream, or by observation of the animal representing the totem of the suspected person, or by the intervention of a professed wizard, who is called in to exercise his powers. If the patient dies, his friends endeavour to take revenge upon the culprit thus discovered. In some cases they take the first opportunity of killing him; in others he is called upon to purge himself by the ordeal of standing before them while they throw their weapons



AUSTRALIAN ABORIGINES MAKING A BARK CANOE.

at him; and in some tribes the Council of Elders send out an armed party to take the life of the supposed offender, if he be a member of their own community. The party generally visits his encampment at night and calls him by name. He comes forth at their call, and frequently submits to his fate without an effort to escape or to defend himself.

The professed wizards are greatly feared, and it is certain that, to some extent at least, they believe in their own powers. Most of the methods are common to savages every-where, and need not be here described. There is, however, a curious operation supposed to be performed by the wizards which seems to be peculiar to Australia. The natives believe them to have the power of casting a spell upon their victim which throws him into a state of magic *coma*. According to the native superstition they then make an incision under the lower ribs, and extract the omentum fat, after which they close the incision by magic art without leaving a scar, or any other trace of their handiwork. The victim wastes away and dies; but during his illness he generally has

a dream, or vision, in which he sees the man who has done him to death. This is the operation which has been erroneously described as "the taking of the kidney fat."

It has been frequently asserted that the Australian Aborigines have no religious belief, but this is a mistake. Among all the tribes there is a belief in the existence of a Great Ancestral Spirit, known by various names, such as *Daramulum*, *Baiame*, *Bunjil*, etc., and spoken of with bated breath as "Our Father." His name is seldom uttered, excepting during the ceremonies of initiation or other specially solemn occasions, reference being made to him by pointing upwards, or by the use of the term "Our Father." According to the tradition, he formerly lived upon the earth, and gave to the tribes the laws which govern marriage and descent, taught them how to hunt, and instructed them in the manufacture of their weapons, utensils, etc. In short, he is their Great Ancestor, a sort of deified Australian Abraham, who being removed from earth to sky, still exercises over his descendants a supervision, which, though benevolent, is stern to punish offenders against the ancestral customs. Some tribes believe that he lives in a sort of "divine inaction." The active agent between him and his children on earth being his son *Tundun* (known by various names in various localities) whose voice it is that is heard in the initiation ceremonies when the wooden instrument, already mentioned—which is known as a plaything to English boys as the "bull-roarer," and to German lads as the *brummer*—makes its booming sound. This is precisely the "Voice of *Oro*," heard among African tribes, and produced by the same instrument. The natives believe also in other beings who are supernatural, but who were all formerly men upon the earth. In short, the spirit-world is, to their minds, a reproduction of the material. The dead are living there much as they lived here, but not unmindful of their descendants, whom they visit in dreams and visions of the night, or in the shape of the animals which are their totems, warning them against danger, imparting magic power, teaching them charms against the witchcraft of their enemies, and generally watching over them; and the Great Elder or Headman of the spirit-world is *Daramulum*, or by what other name soever he may be called.

Burial customs differ very widely, and it is impossible to give full details concerning them within the limits of this work. Some tribes bury their dead in shallow graves, the corpse being frequently bound in a crouching posture, and covered with sheets of bark, or heavy logs, to keep the wild dogs or other animals from reaching it. Others leave the body on a stage, or in the fork of a tree, or deposit it within the trunk of a hollow tree, closing the opening with a sheet of bark. In some places the friends of the deceased cut part of his flesh from his bones, and carry it about with them for a time. The dead man's hand is elsewhere slung by a cord round the neck and under the arm of a surviving friend, and is supposed to warn him of danger by a ghostly pinch. The eating of the omentum fat, to assuage the grief of the mourners, has been already noticed. Certain tribes roast their departed kinsman over a slow fire until the outer skin rises, when it is peeled off, and the body is then basted with grease and red ochre, the "dripping" being carefully preserved for purposes of witchcraft. When the corpse is well dried, it is carried from place to place to be howled over; then it is put for a time on a stage, or in a tree, and finally buried. A singular custom prevails in at least one locality in Queensland. The corpse is carefully flayed, and the skin is preserved with the hairy scalp, and even the finger and toe-nails, still attached.

It is supposed to have great curative powers in sickness, especially in rheumatic affections, and is spread like a blanket over the patient. Some tribes have regular burial-places, with the insignia of the various totems cut in the bark of the surrounding trees, and with mysterious symbols raised in relief on the ground; while others dispose of their dead in the localities where they die. The natives go into mourning after various fashions. In some places both sexes cut off their hair, and gash themselves, while the women smear their foreheads with filth. Everywhere some sort of distinctive face-paint is applied, but tastes differ in this as in other matters. Some tribes consider black paint and grease to be appropriate symbols of woe, but more frequently the natives use



A NATIVE TROOPER FOLLOWING A TRAIL.

yellow ochre, pipe-clay, or burnt gypsum, and the "messenger of death" has white circles painted round his eyes. A very common practice is to cover the heads of the women with a thick plaster of pipe-clay, or burnt gypsum, made into a paste with water. This is left on their heads until it dries and falls off; and, in some places, the detached lumps are placed on the grave of the departed.

Wherever the Australian blacks have been brought into contact with the white men, they are fast disappearing. The ancient regulations which governed their social condition are broken down, and no sufficient substitute is provided. Drunkenness, the disease of vice, and the occupation of their hunting-grounds by the cattle of the settlers, altering their modes of life, and bringing them into surroundings which are disadvantageous to

them—these causes alone, if there were no others, would be sufficient to account for their decay. Add to all these the irregular warfare which has always been waged along the outer fringe of our advancing settlement, and we need seek no further for an explanation of the rapid extinction of the native race. The Colonial Governments

and the various churches have done something for the miserable remnants near our centres of population, by the establishment of stations, where they are housed, fed, clothed and instructed. But the natives do not flourish



under these conditions, and their final disappearance from the scene seems to be only a question of time.

Something has already been said about the Maori tribes, in dealing with New Zealand. The people comprising this fine race of men are deservedly regarded as the most remarkable yet met with, and they are acknowledged to possess in a singular degree some of the noblest traits of character that are to be found among the native races of any part of the world. The Maoris are not aboriginal to New Zealand, and some doubt still exists as to the actual cradle of the race. Many theories have been ventilated on the subject, and perhaps the favourite is that which traces them from the Samoan Group—or, as their own traditions name the place of their origin,

ABORIGINAL METHODS OF DISPOSING OF THE DEAD.

ABORIGINAL METHODS OF DISPOSING OF THE DEAD.

Hawaiki. The legend runs that a chief of Hawaiki left the Island after a civil war, landed in New Zealand, and returned thence to Hawaiki with marvellous accounts of all that he had seen in his adventurous career, and of the richness of the new country he had visited. The traditions differ as to the name of this chief, but whether the adventurer was known as Kupe or Ngahue the legends concur in making him the leader of the expedition that planted the Maori race in New Zealand. When Cook landed he found the Islands apparently crowded by a dense population. This appearance was, however, misleading, and arose merely from the tendency of the Maoris to cluster along the shore-line and at the mouths of rivers. It has since been computed that the total number of Maoris at that time could not have been more than about one hundred and fifty thousand, which lessened to eighty thousand by 1840, and has now further shrunk to considerably less than half that number. Cannibalism existed in New Zealand from the earliest periods known to Europeans, and sailors belonging to the expeditions of both Tasman and Cook met their fate in this way. The custom of eating the bodies of enemies killed in battle, obtained up to a very late period. The practice of tattooing was general in the early days among the Maoris, but is now rapidly dying out. Many singular customs are still retained by the Maori people of the present day, among others the very curious one of "rubbing noses" when friends meet, just as Englishmen would shake hands. The remnant of the Maori race is now comparatively civilized, and some of the wealthier representatives of the people occupy honourable positions in the colony.

FLORA.

THE vegetation of Australia, when sketched according to the regional distribution of the species, commences naturally with the Flora of the South-western Colony, because there the endemism is most strongly expressed, and the richness of specific forms is there rendered most remarkable by their typic singularity and by the multitudinous display of highly ornamental features. In this respect, extra-tropic Western Australia surpasses even the exuberant and gay floral fields of the south-east part of this Continent, and has its only rival in the most southern portion of Africa.

It would be a vain endeavour to present in detail, within the scope of a purposely limited essay, a complex of floral forms so vast; but particular allusion might here be made at once to the marvellous variety of "Heath-Myrtles," chiefly comprised within the genera *Darwinia*, *Calycotrix*, *Lhotskya*, *Thryptomene* and *Bæckeia*; and further to the "Fringe-Myrtles," all referable to *Verticordia*, and hardly represented elsewhere, some of which, though strangers yet to horticulture, have an incomparable beauty of their own. The myrtaceous order, so vastly developed in South-western Australia, comprises there also magnificent species of *Beaufortia*, *Regelia*, *Calothamnus*, and *McLaleuca*, reminding one of the famous South-eastern "Bottle-brushes;" while, in the glorious colouring of their flowers, they participate in the brilliancy of some Eucalypts, the congeners of which elsewhere appear mostly in sombre floral hue. But more astounding are the gigantic dimensions reached by the Karri-Eucalypt (*E. diversicolor*), which species and our South-eastern *E. amygdalina* may be counted perhaps as the tallest trees of the globe, though they cannot compare in massive compactness of ramification with the colossal Sequoia

Pines of California. Indeed, the ultimate height of Eucalypts is sometimes only reached by a solitary bough, or some few straggling branches, quite unlike the uniformly close and densely symmetric growth of most conifers; and hence a Eucalypt of exceptionally great height might not be recognized as such, though (to make use of the expressions of a local observer of Karri-trees), "it is only by successive efforts that the summit of such giant trees comes within visual reach; whilst in their enormous stem-circumference perhaps the Eucalypts and the Sequoias stand unrivalled."

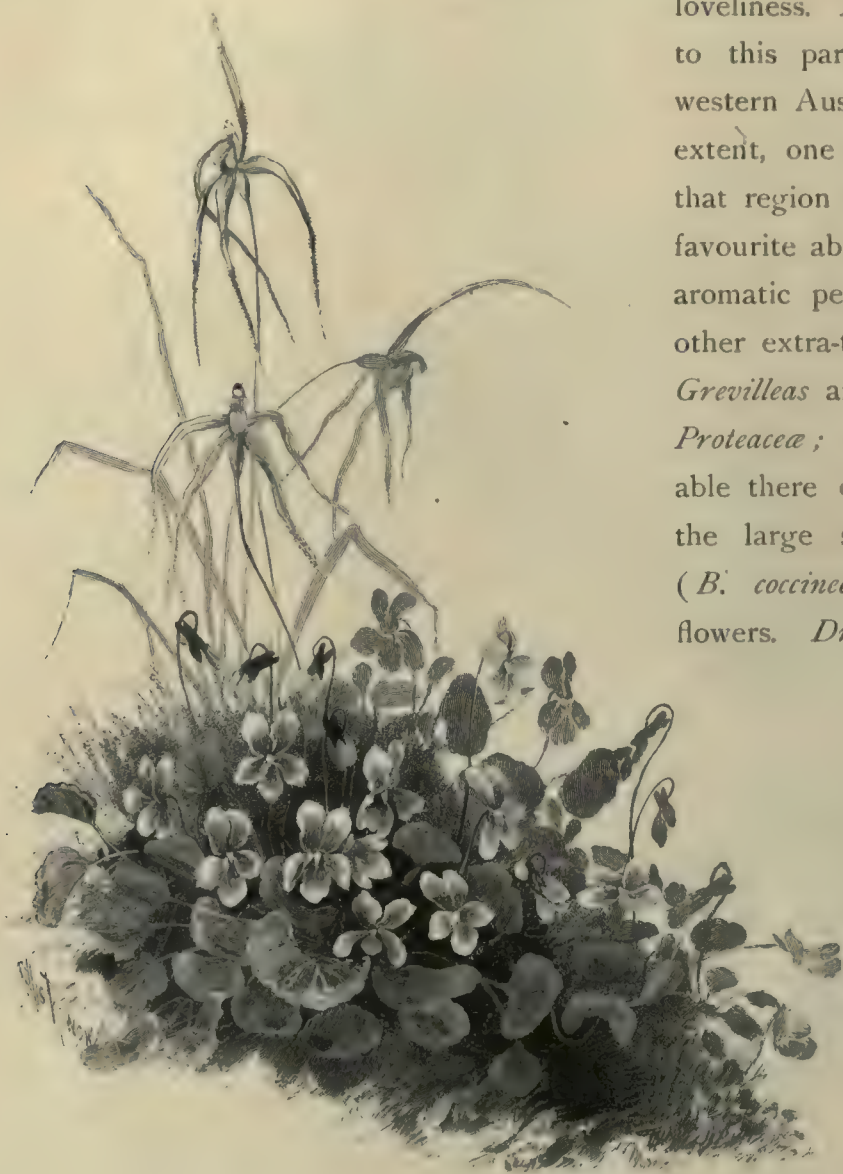
Irrespective of striking beauties in the vegetation of Western Australia, there is an obvious occurrence of specific forms pertaining to many genera not represented beyond Australia. Thus, there are the *Candolleas* and *Leschenaultias* of tender and exquisite

loveliness. *Boronia*, a rich genus restricted to this part of the world, is in South-western Australia developed to the amplest extent, one species (*B. megastigma*), from that region having become a conservatory favourite abroad, on account of the strong aromatic perfume of its flowers. As in other extra-tropic regions of Australia, the *Grevilleas* and *Hakeas* predominate among *Proteaceæ*; some *Banksias* are remarkable there either for their tallness or for the large size of their fruit, and one (*B. coccinea*), for the brilliancy of its flowers. *Dryandra*, also endemic in Western

Australia, reckons numerous species. Very similar to some arborescent *Grevilleas*, is the *Nuytsia*-tree, with its ample golden-yellow flower-bunches, and, like the shrubby *Atkinsonia* of the Blue Mountains, entirely terrestrial, though structurally belonging to the order of Mistletoes.

Here nearly the only

Australian kind of Sandal-trees with fragrant wood (*Santalum cygnorum*) is to be found. Of the great genus *Acacia*, represented in all the warmer zones, that of South Europe excepted, there are in Australia fully two-thirds of the species. The principal "Wattle" of this territory for tan-bark is *A. saligna*, while the species there with scented wood, similar to that of Myall in Eastern Australia, is *A. acuminata*, from which a cosmetic oil can be remuneratively distilled.



AUSTRALIAN VIOLETS.

The South Australian flora, and, to a great measure, that of Central Australia,

begins at the western extremity of the Great Bight—at all events, as regards the generality of low-land plants. This vegetation consists of species able to sustain vigour in a clime of extreme summer heat and very scanty rains. Though in its constitution much varied, physiognomically the vegetation is monotonous. Large trees are missing over wide tracts of the country, unless the Red Gum-tree (*Eucalyptus rostrata*), which affords an almost imperishable timber, indicates by interrupted lines the direction of some water-course, not flowing, perhaps, for years. From eminences seldom lofty, the traveller may glance in many places over a “sea of scrub,” in which the dwarf Mallee-Eucalypts probably predominate, or which may be formed by a gayer assembly of phyllodinous and often pungent *Acacias*, highly ornamental *Eremophilas*, often interspersed with sticky *Dodonæas*, small-flowered *Asters*, fragrant *Cassias*, and woody *Salsolaceæ*, the latter as “salt-bushes,” affording, particularly in some of the species of *Atriplex* and *Kochia*, the best nutriment for flocks in these regions; indeed, *Atriplex nummularia*, and particularly *A. halimoides* and *A. vesicaria*, may through wide stretches of country be the main occupants of the ground, unaffected even by the occasional aerial wafts. The Australian salt-bushes number more than a hundred kinds. The total absence of *Orchideæ* in the dry steppes is noteworthy as a most surprising fact, though on the meadows towards the south these lovely plants are again of frequency. It is in the dry country, where the angiantheous herbs, although seldom tall, often annual, and perhaps of no rural significance, contribute so much by their thousand-fold, or even million-fold, growth in some species, to the yellow tint of the vernal vegetation in moist or favourable seasons.

It may also now be aptly noted that the Wild Stramony occasionally accompanies the much more widely dispersed native Tobacco, while another Solanaceous shrub, the “Pitchery” (*Duboisia Hopwoodii*) promotes tribal intercourse, inasmuch as the native warriors



THE DIANELLA TASMANICA.

need this very local plant as an excitant. At the verge of the tropics, on rivulets of the Macdonnell Ranges, suddenly a Fan-palm makes its appearance, exiled, as it were, from its princely co-ordinal companions, yet proudly sustaining a noble altitude. Ferns, in these regions, are of the most scanty occurrence; and then at wide distances only, if not entirely absent, *Cheilanthes tenuifolia* and *C. vellea* being almost the only

representatives. Many of the native grasses here are exquisitely adapted for the trying climate; as instances, may be mentioned the famous Mitchell-Grass (*Astrebla*), in two species, and the likewise perennial *Pappophorum* as among the most drought-resisting and best relished of our national desert provender. Among nutritious pasture-grasses of the vast interior, *Poa* and *Danthonia* furnish largely the extra-tropic species, *Eragrostis* and *Eriachne*, many of the intra-tropical, some gregarious and very widely distributed.

Food-plants worth mentioning are, however, extremely limited in number throughout the dry interior region; and thus the root of a sort of native Scorzonera (*Microseris Forsteri*) is rather palatable, while the Quandang-tree (*Santalum acuminatum*) and a Nitraria-bush (hardly distinct from that of the saline steppes of Asia), some *Leptomerias* and the small Muntry-shrub (*Kunzea pomifera*), yield fruits really relishable, though the last mentioned plants are more frequent at the coast than inland, where also the *Mesembrianthemum æquilaterale* more abounds, well deserving notice for its sweetish somewhat fig-like fruit. *Chenopodium auricomum* affords



AUSTRALIAN TERRESTRIAL ORCHIDS.

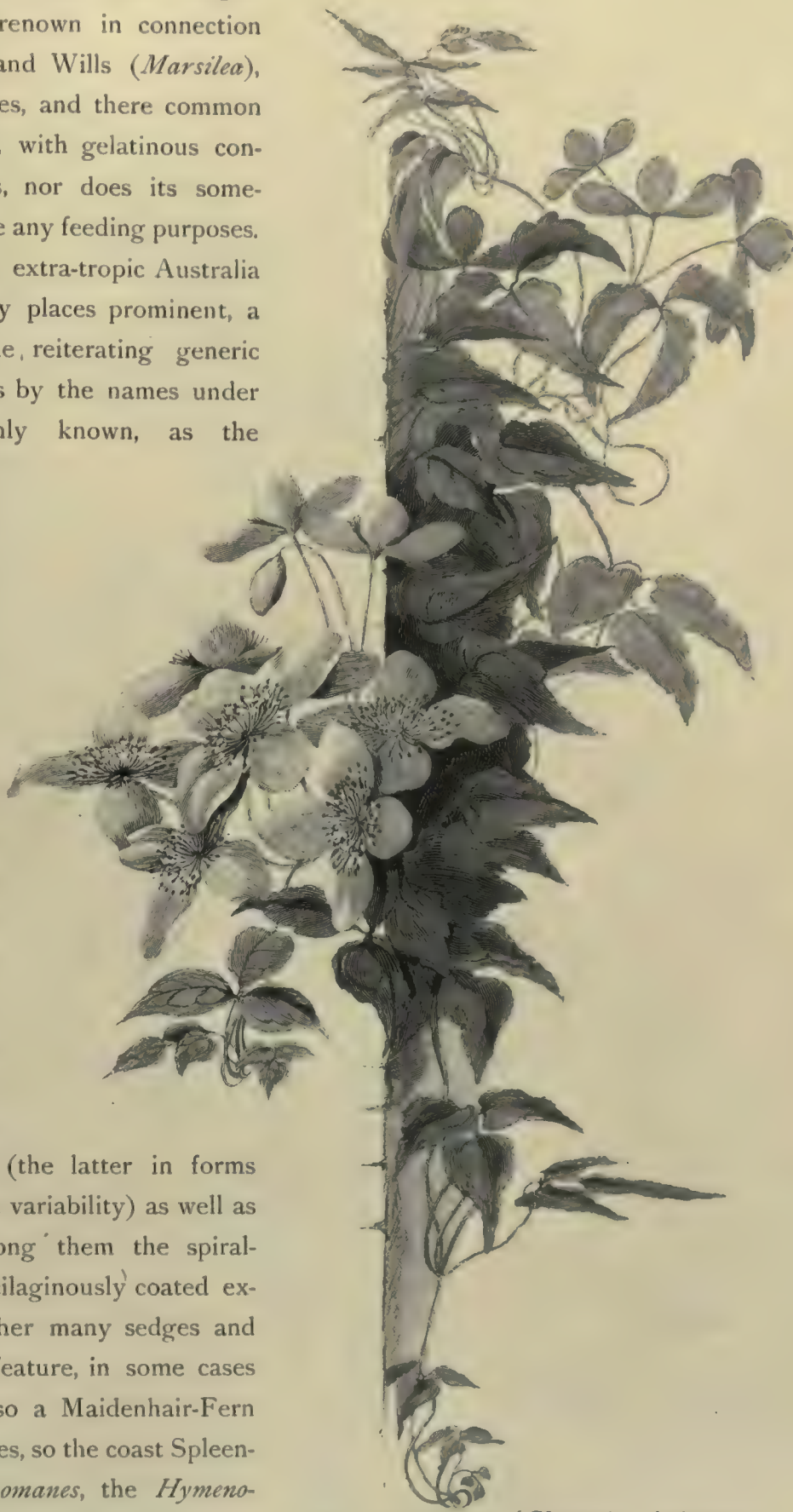
widely through the interior a really good spinage-plant, with the advantage of being tall and perennial. The fruits of many kinds of *Styphelia*, always small, are left as undis-

puted property for the delectation of native birds. To the hilly, and particularly to the riparian tracts, extends from East Australia to St. Vincent's Gulf the evergreen Chinese Raspberry Bush, but, like so many other Eastern plants, it does not cross the waterless country around the great Bight.

The Nardoo, of sad renown in connection with the fate of Burke and Wills (*Marsilea*), is confined to moist localities, and there common enough; but its hard fruit, with gelatinous contents, is fit only for emus, nor does its somewhat clover-like foliage serve any feeding purposes.

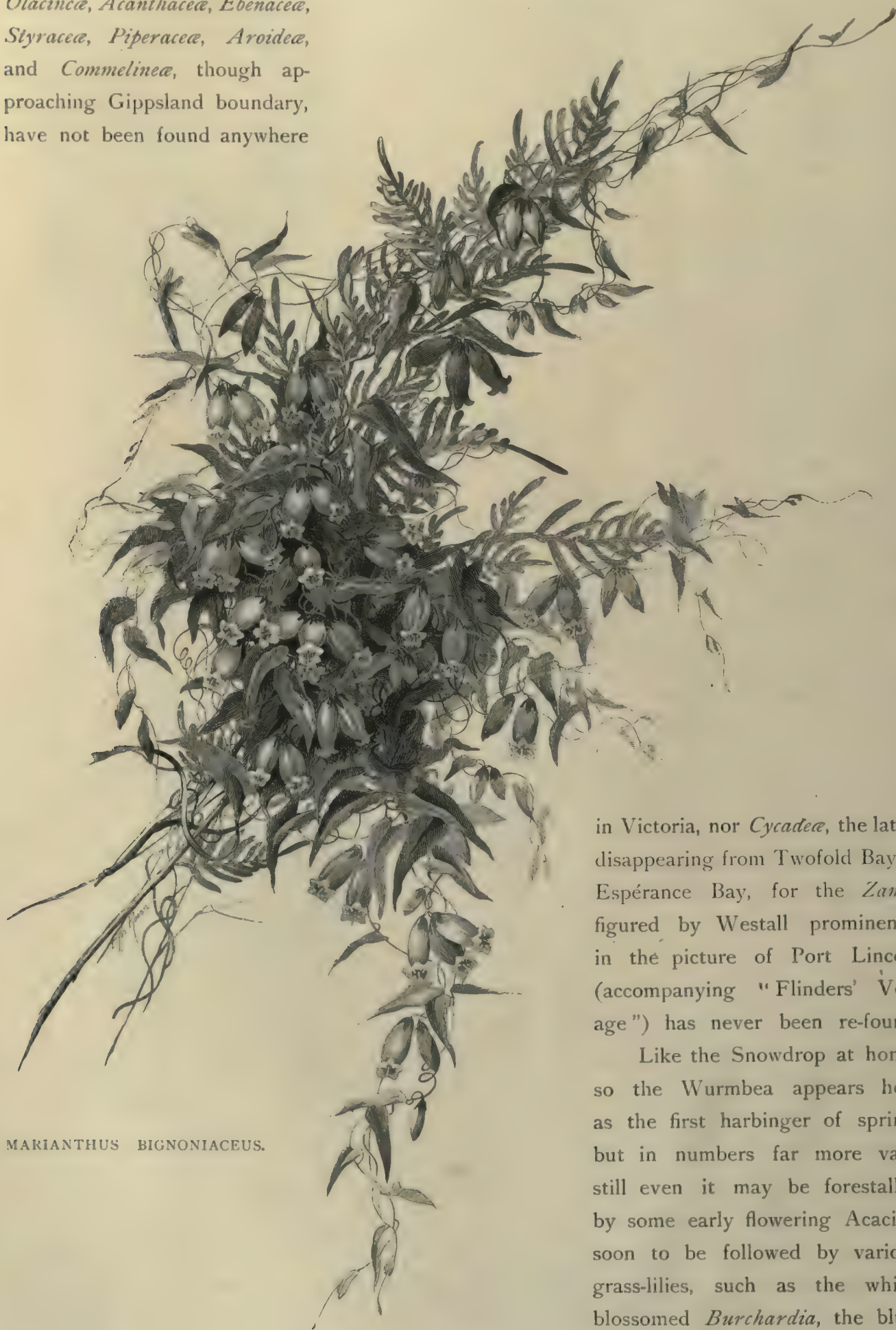
Through most parts of extra-tropic Australia are dispersed, and in many places prominent, a host of herbs, which, while reiterating generic types of Britain, might pass by the names under which they are commonly known, as the Buttercup, Mousetail, Bitter-cress, Violet, Storks-bill, Cranesbill, Flax, St. John's Wort, Pellitory, Stitch Wort, Dock, Cudweed, Woodruff, Bell-flower, Centaury, Bind-weed, Forget-me-not, Heliotrope, Dog's-tongue, Gipsy Wort, Germander and Mint; to which might be added, as having even at home no well-recognized or acceptable popular names, one or more species of the genera *Polygonum*, *Eryngium*, *Galium*, *Samolus*, *Scutellaria*, *Prunella*, *Epilobium*, (the latter in forms demonstrative of the utmost variability) as well as various aquatic weeds, among them the spiral-stalked *Vallisneria*, the mucilaginously coated extra-European *Cabomba*, further many sedges and grasses of familiar British feature, in some cases con-specific. Far south also a Maidenhair-Fern reminds us of European homes, so the coast Spleenwort, the *Asplenium Trichomanes*, the *Hymenophyllum Tunbridgense*, and, to some extent, the

Trichomanes venosum. Closely akin to the "Royal Fern," as regards botanic position, yet widely different in aspect, is the *Osmunda*, or *Todea barbara*, of some of our secluded and irrigated glens.



THE SILVER-BUSH (*Clematis Aristata*).

Richness of ferns commences in Continental Australia only about Cape Otway; they are trending thence through the coastal tracts eastward, until augmented in glorious multitude they become displayed throughout the littoral forests of Queensland. *Meliaceæ*, *Olacineæ*, *Acanthaceæ*, *Ebenaceæ*, *Styraceæ*, *Piperaceæ*, *Aroideæ*, and *Commelineæ*, though approaching Gippsland boundary, have not been found anywhere



MARIANTHUS BIGNONIACEUS.

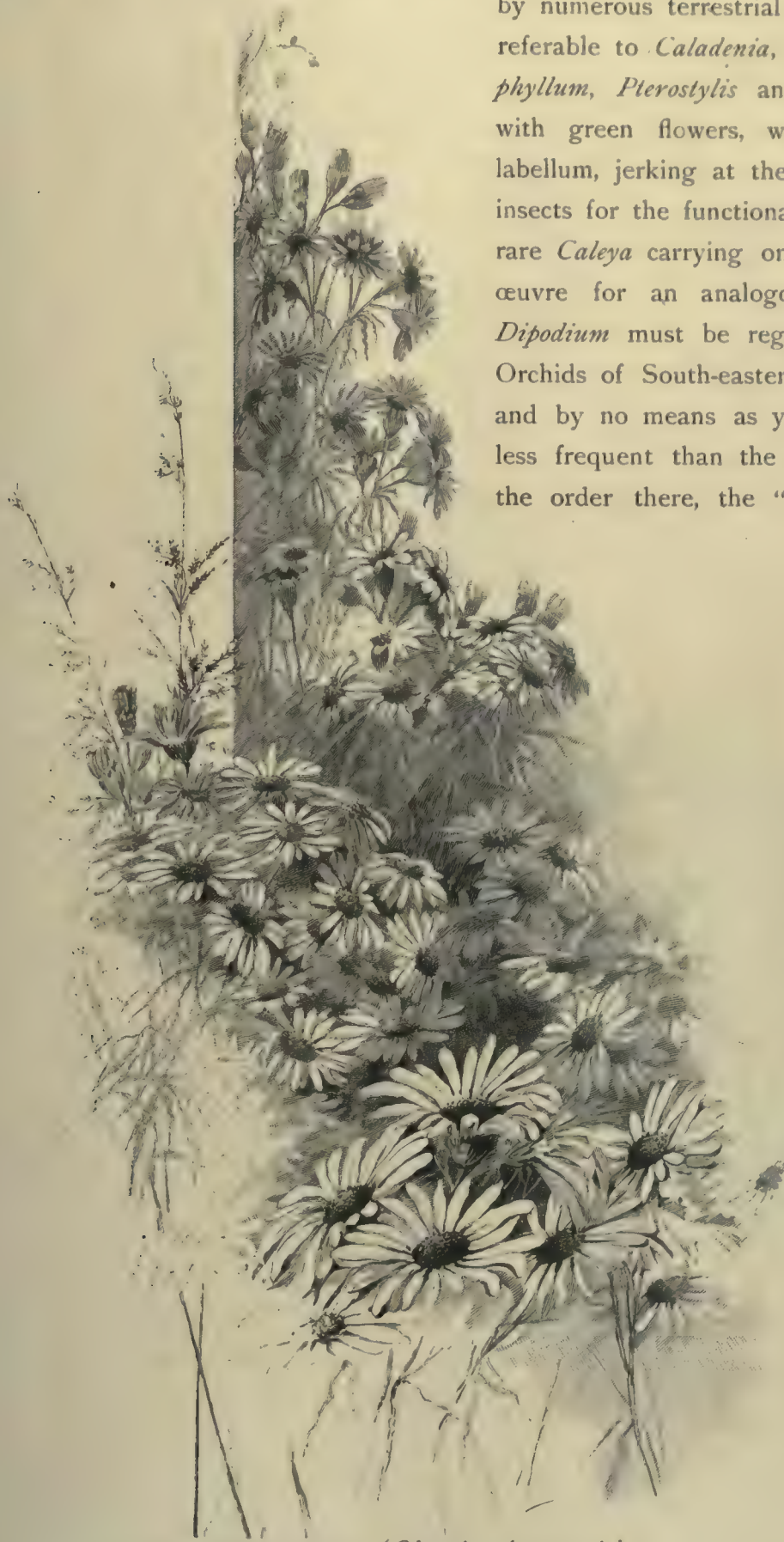
in Victoria, nor *Cycadeæ*, the latter disappearing from Twofold Bay to Espérance Bay, for the *Zamia* figured by Westall prominently in the picture of Port Lincoln (accompanying "Flinders' Voyage") has never been re-found.

Like the Snowdrop at home, so the *Wurmbea* appears here as the first harbinger of spring, but in numbers far more vast, still even it may be forestalled by some early flowering *Acacias*, soon to be followed by various grass-lilies, such as the white-blossomed *Burchardia*, the blue-

flowered *Chamæscilla*, *Cæsia* and *Dianella*, the *D. Tasmanica* particularly robust, the yellow-racemed Bulbine, the purple-flowered *Arthropodium*, and accompanied in various colouring

by numerous terrestrial species of Orchids, mainly referable to *Caladenia*, *Thelymitra*, *Diuris*, *Prasophyllum*, *Pterostylis* and *Microtis*, the latter two with green flowers, while *Pterostylis* presents a labellum, jerking at the slightest touch to entrap insects for the functional benefit of its flowers, the rare *Caleya* carrying on a somewhat similar manœuvre for an analogous purpose. The leafless *Dipodium* must be regarded as the tallest of all Orchids of South-eastern Australia, quite a proud, and by no means as yet a rare plant, though far less frequent than the prettiest of the species of the order there, the "Spider-Orchid" (*Caladenia Patersoni*).

The Victorian Flora remains in this respect remarkable, as it still includes representatives of genera, which nowhere else recede so far from the tropics. Thus the great lily-like *Crinum* and a splendid Jasmine, with the arboreous *Capparis Mitchellii*, still grace the banks of the Murray River. *Solanums*, *Myrsine* and *Avicennia* extend nearly to Port Philip. *Eugenia Smithii*, the "Lilly Pilly" of the colonists, appears as far as Lake King in Gippsland, and *Alstonia constricta*, the "Bitter bark" of the interior, occurs in the north-west of the colony, New South Wales and Queensland. The lovely



ASTER ASTEROTRICHUS (*Olearia Asterotricha*).

Fieldia gives us among *Gesneriaceæ* also a stray plant from the hot zone, decorating the trunks of our fern-trees, while in Eastern Gippsland still occur trees or shrubs or climbers of *Eupomatia*, *Acronychia*, *Sarcopetalum*, *Stephania*, *Ficus*, *Claoxylon*, *Omalanthus*,

Nephelium, two kinds of grape-vines (with edible and perhaps improvable fruit) and a Sarsaparilla (*Smilax*). Even the ordinary Fan-Palm (*Livistona Australis*) glories yet there with stems fully eighty feet high. *Clematis aristata* and *Marianthus bignoniaceus* are among our most handsome climbers, the latter particularly rare. Asters are numerous, nearly all small-flowered and shrubby here, but one Alpine species (*Celmisia*) is herbaceous and large blossomed, with whitish, silky stems and leaves, like those of the *Astelia*, with its densely tufted habit, on our snowy regions.

Before we pass in our considerations from the Flora of Victoria onward to that of New South Wales, some remarks should be devoted to that of Tasmania. Its peculiarities are mainly contained in the mountain and particularly in the highland vegetation.



TASMANIAN WILD-FLOWERS.

Most prominent in this respect are the conifers, not less than six of them being absolutely restricted to the Alpine region of the Island, and three others also, endemic; more than this, we are led to comprehensive reflections, when we recognize that the botanic affinity of the three *Arthrotaxis* Pines of Tasmania is, as pointed out by Sir Joseph Hooker, so great to that of the stupendous *Sequoias* of California, that the latter could systematically be placed into the genus *Arthrotaxis* as *A. gigantea* and *A. sempervirens*, although in the vast space which severs these trees no mediating congeners occur to effect any geographic connection between them. Thus additional light is shed in some respects by these now far-isolated trees on

the geologic history of widely separated portions of the globe, an interesting subject of which our space forbids further mention. The several *Richeas* are all Tasmanian, though one extends to the Australian Alps; but the arborescent *Dracophyllums* exist also in New Zealand, and one even at the summit of Mount Bellenden-Kerr, in Queens-

land, while the largest of all (*D. Fitzgeraldi*), is confined to Lord Howe's Island, all pointing to a coeval epoch in the migration or development of these notable plants of the Epacrid order.

The first discovery of Eucalypts will ever remain memorable for Tasmania. Indeed Tasman's carpenter, as indicated in an earlier part of this work, seems already to have been astounded by their vast dimensions. Exactly one hundred years ago, the genus Eucalyptus was founded by l'Héritier, on the ordinary stringy-bark tree (*E. obliqua*), of which he obtained branchlets gathered by Captain Cook's officers during their third expedition, not far from where the city of Hobart was subsequently built. From that historic spot, towards the end of the century, *E. globulus* was also obtained, as one of the marvels of the vegetation of the world, namely, during Captain d'Entrecasteaux's expedition in search of La Pérouse and De Langle. Unlike *E. obliqua*, the Blue-Gum tree extends hardly beyond Tasmania and Victoria as indigenous, nor does it constitute by gregarious growth any extensive forests of its own. Similarly restricted to Tasmania and Victoria is the *Fagus Cunninghami*, a large ever-green beech; and almost the same might be said of the most aromatic of all the so-called Sassafras-trees (*Atherosperma moschatum*), because New Zealand, New South Wales and Queensland have Sassafras-trees of their own, though all are allied to each other. The absence of Mistletoes in Tasmania, and even still in King's Island, is singular; to the latter, however, the Celery-leaved Pine (*Phyllocladus rhomboidalis*) extends, and even in New Zealand several species of *Loranthus* reach far south. As among the last remnants of tropic vegetation there, may be considered the woody Lyonsia-climber and two diminutive species of epiphytal Orchids. But Fern-trees of palm-like aspect, and as expressive of the flora of warmer zones, though absent in the living vegetation of the continent of Europe, even in that of the most southern regions, form a superb picture yet in



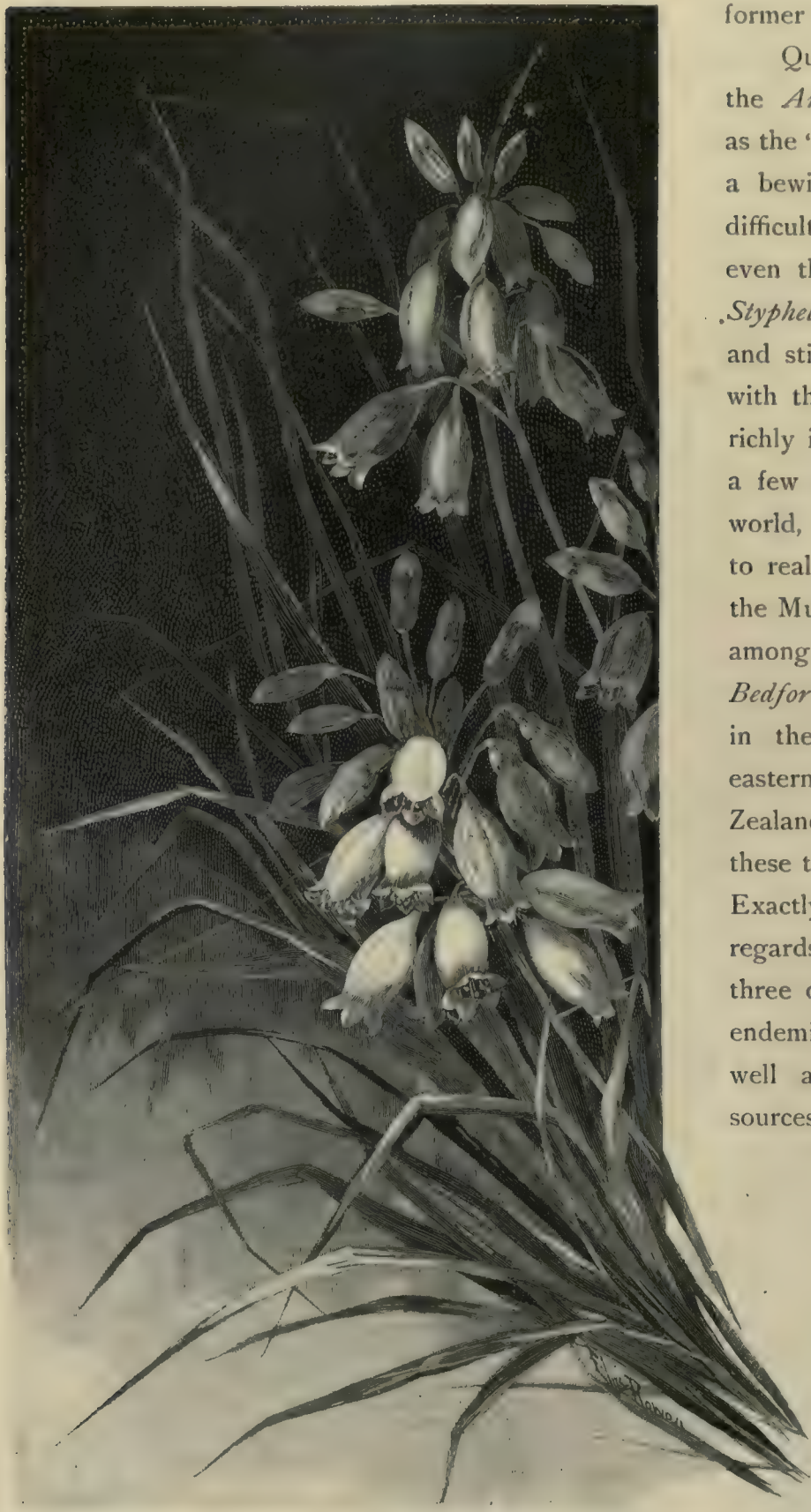
EPACRIS IMPRESSA.

many of the sylvan landscapes of ours as far south as Tasmania, the more slender *Alsophila Australis* occupying the slopes of valleys, the more robust but less lofty *Dicksonia Billardieri* seeking the margins of brooks and rivulets; yet the latter never

approaching antarctic regions as its former specific name would imply.

Quite endemic in Tasmania is the *Anodopetalum*, popularly known as the "Horizontal Bush," from which a bewildered wanderer may find it difficult to get disentangled, more so even than from the *Bauera* Scrubs. *Styphelia Oxycedrus* is often costal, and still more beautiful when loaded with the red fruit than when bearing richly its white flowers. Here, as in a few other insular positions of the world, we find the *Compositæ* advance to real tree-growth; hence we obtain the Musk-Aster (*A. argophyllus*), and among *Senecios* the Duke's-tree (*S. Bedfordi*). These, however, extend in the identical species to South-eastern Australia, whereas in New Zealand the arborescent features in these two genera are not con-specific. Exactly the same takes place as regards the evergreen Beeches, the three or four of New Zealand being endemic; but doubtless these all, as well as the *Fagus Moorei*, at the sources of the Clarence River, being,

like the Tasmanian and the Victorian and the European Beech, sustained in their nourishment through most delicate and peculiar fungus-growth at the extremest root-particles. The festoons formed by *Tetragonia implexicoma* on the shores of Tasmania, extend also along the whole south coast of



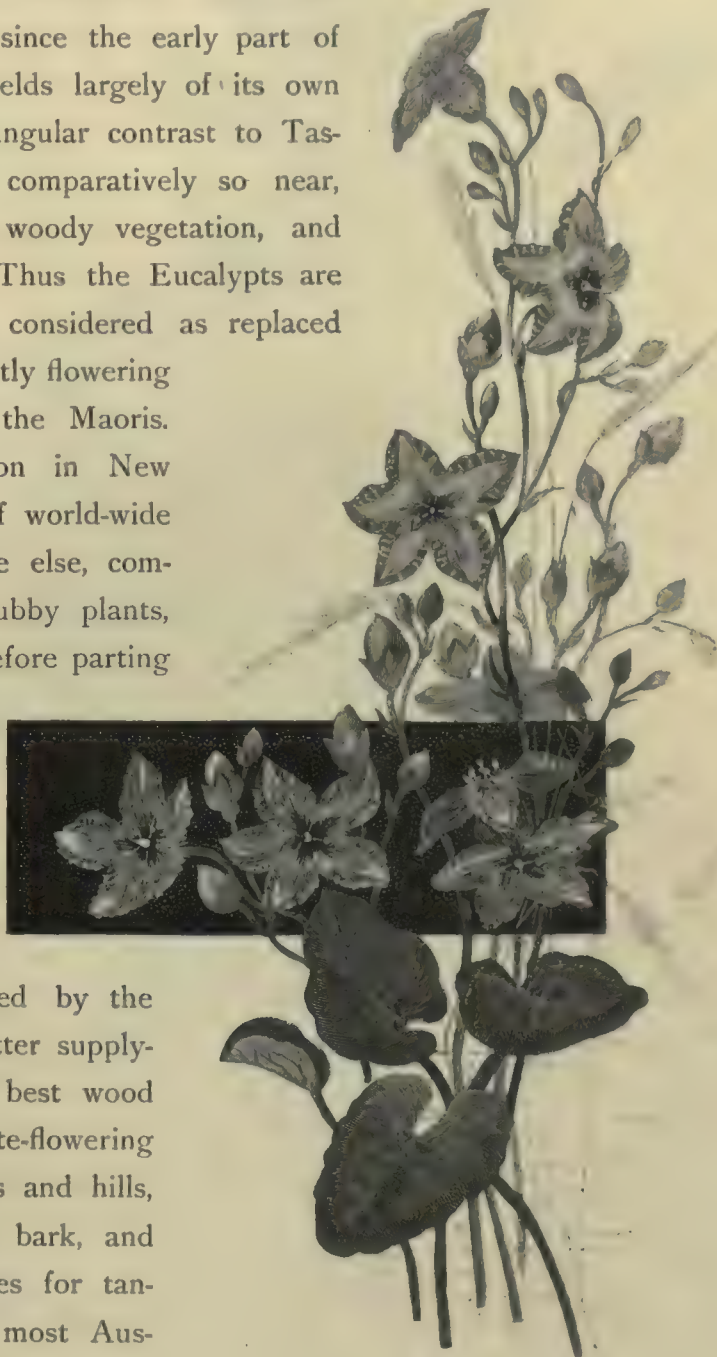
CHRISTMAS BELLS (*Blandfordia Nobilis*).

Australia, the leaves serving like those of *T. expansa*, indigenous here, and known as "New Zealand Spinage." The Button-Rush (*Sclenus sphaerocephalus*) forms large tussocks

with ponderous trunks, chiefly on moor-ground occupied by the most common of the several of the Australian Grass-trees (*Xanthorrhæa*). *X. Australis* extends to Tasmania, and the stem attains several feet in height, the spike without the stalk exceptionally eight feet in length. Larger still are seen *X. Preissii* of Western Australia, where it is of extraordinary frequency, and farther *X. resinosa* or *X. arborea* of New South Wales and Queensland, and *X. Tatei* of Kangaroo Island, all yielding a balsamic fragrant varnish-resin, rich in picric acid. The Arundo-Reed and the Reedmace-Typha are here with us far south quite the same as the European kinds. The almost incomparable heath-like *Epacris impressa* hailed for horticulture from Tasmania, and has been prized for such since the early part of the century, but it forms vast flower-fields largely of its own in South Australia and Victoria. In singular contrast to Tasmania stands New Zealand, although comparatively so near, through the utter difference of the woody vegetation, and indeed much of the herbaceous also. Thus the Eucalypts are entirely wanting, and cannot even be considered as replaced by the somewhat allied and often brilliantly flowering *Metrosideros*-trees, the famed *Rata* of the Maoris.

A great feature in the vegetation in New Zealand is the *Veronica*, that genus of world-wide distribution being richer than anywhere else, comprising forms from small trees to shrubby plants, some with even Cypress-like foliage. Before parting from the Tasmanian vegetation special allusion should be made to the Tan-Wattles, which have become celebrated. The only "Silver Wattle" of valleys and river-banks (*A. dealbata*) grows into the largest of the *Acacia*-trees there, unless it may be exceeded by the Blackwood-tree (*A. melanoxylon*), the latter supplying splendid furniture-wood, and the best wood for bending under steam. The late-flowering Black Wattle (*A. mollissima*), of ridges and hills, furnishes a still heavier and stronger bark, and offers one of the most profitable trees for tan-bark anywhere in existence, but like most Australian plants it will not endure severe frosts. The two Wattle-trees just mentioned extend also in

masses to Victoria and New South Wales, while the Sydney Wattle (*A. decurrens*) hardly occurs beyond the boundaries of the eldest colony, and is distinguished by the leaflets being not so minute nor so crowded. The fresh-water plants of the whole extra-tropic portions of Australia, from the minute Duckweeds to the *Potamogetons*, remind one of European forms; but many of these forms are not repeated, such exotics as *Ottelia* taking their



LIMNANTHEMUM EXALTATUM.

place, or, as in the case of *Limnanthemum exaltatum*, peculiarly Australian species being substitutes of the European. As regards marine Algs, this part of the world can boast of the richest flora anywhere in existence, not only in number of species, but also in beauty of colouration and delicacy of structure, our *Claudea*, with its reticular sail-shaped red fronds, proliferously branched, being considered the most handsome of sea-weeds in the world. In greatest copiousness they are met along our Continental south coast; but the Algal flora of Tasmania and New Zealand generally is splendid in the extreme.

In turning now more particularly to the New South Wales vegetation, it may be remembered that it was on the classic ground at Botany Bay, where Banks and Solander

during a few days' stay in April, 1770, beheld for the first time the marvels of entirely new vegetation, which, with their discriminating knowledge as naturalists, they could at once understand and appreciate. It was from thence, that at the end of the last and at the beginning of this century, such garden favourites as several (particularly phyllo-dinous) species of *Acacia*, the *Callistemon lanceolatus*, the Myrtle-like *Eugenia Australis*, *Helichrysum lucidum*, *Tecoma Australis*,

Dendrobium speciosum, *Bauera*, *Correa*, *Kennedya*, *Sprengelia*, *Woollsiä*, and more than one *Eriostemon*, found their way into the conservatories of Europe, where they have maintained their place ever since. Subsequently, the conservatories of Europe became enriched with the tall Spear-Lily (*Doryanthes*), magnificently flowering in

big red clusters, or spikes, and soon followed the less pretensive *Blandfordias* and Fringe-Lilies (*Thysanotus*), the *Hoveas*, *Actinotus*, *Pimeleas*, Staghorn-fern, and a host of other showy plants; while what ornamental culture would disdain was eagerly accepted for University gardens to study, for the purpose of science in a living state, the often quaint but always instructive organization of Australian plants, recalling to mind the forms of olden times.



THE WARATAH,
(*Telopea Speciosissima*).

As regards the tree vegetation, it might be mentioned that the number of Eucalypts of specific difference is greater within the boundaries of New South Wales than in any other of our colonial territories, half a hundred distinct kinds having become known from the oldest Australian colony. As trees impress the main feature on the vegetation of any landscape, we would single out, in passing, a few here, as worthy of special mention. The *Cedrela Australis*, called the red cedar, has its home even far south in the once celebrated "Brushes," many of which, however, now belong only to the past. *Cedrela* in Eastern Australia, as in some tropic countries elsewhere, furnishes for us the most easily worked and yet long-lasting timber, though the kinds of useful and also of ornamental woods of New South Wales are extraordinarily numerous. *Macadamia ternifolia* is also a "nut-tree" of real value; the number of planted trees of *Ficus macrophylla* for avenue purposes is probably much larger now than what remains of this grand tree on its pristine grounds, it being mainly chosen for shade in all regions free from frost. *Stenocarpus sinuosus* is, in foliage and flowers, of an unsurpassable beauty of its own, while the large order of *Proteaceæ* (besides the two last mentioned arboreous forms) furnishes the Waratah of universal renown (*Telopea speciosissima*). The Wooden Pear (*Xylomelum pyriforme*), declared as such in the earliest writings on Australia in a strain of fabulous interpretation, is rather a shrub



THE CHRISTMAS BUSH (*Ceratopetalum gummiferum*).

than a tree. Just so, it was gravely related, to the astonishment of those at the Antipodes, that our so-called Native Cherry-tree (*Exocarpus*), bore the stone outside the fruit. The *Ceratopetalum gummiferum* is known as the "Christmas Bush." The Duboisia-Bush (*D. myoporoides*) has quite recently proved of great value for medicinal purposes, particularly as a mydriatic. In secluded spots, Leichhardt's slender Fern-tree (*Alsophila Leichhardtiana*), occurs with other varieties of ferns, or the huge *Platycerium grande* clasps some venerable trunk, or the widely-spreading but delicately-fronded *Lygodium*, and even the gigantic *Angiopteris* fern, may be seen in deceptive similarity with *Marattia* in the northern part of New South Wales. A high-stemmed Galeola-Orchid may compete there in extensiveness with the far-away Javanic *Grammatophyllum*, or with the Vanilla-plant; and yet the largest of all Orchids may be con-sociated with the minutest *Bulbophyllum*; or the equally epiphytal *Ophioglossum pendulum* may droop from some huge branch with its single but very long ribbon-like leaf.

The extent of Queensland, through not less than eighteen degrees of latitude, and its approach within ten degrees to the equator, secures for it a vastly developed tropical flora, particularly on the eastern slope of the ranges and along the littoral tracts; while the western fall of the country trends gradually to the widely level interior with generally but scanty rain-fall, and with a participation in an inland flora which occupies in its general similarity almost two-thirds of our whole Continent. A vegetation stretching from sub-tropical to almost equinoctial parallels must, even through the humid eastern tracts, show much dissimilarity; yet many prominent types in this extensive vegetation pass through all, or nearly all, latitudes of Queensland: for instance, some of the almost endemic *Flindersia*-trees, monumental also among plants for preserving the name of a great naval explorer; farther the *Helicia*-trees, which genus, however, extends northward to the Philippine Islands, and even to Japan; the *Albizia*-trees, with large leaflets, one species (*A. Vaillantii*), among about seven thousand *Leguminosæ* unique in numerous fruitlets; and the *Brassaia*-tree, with mighty crimson inflorescence and grand foliage. *Eucalyptus citriodora* and *E. Staigeriana*, offer the oil of their delightfully fragrant foliage as a vehicle for the distillation of such precious scents as are not readily fixed. In its gigantic pods the *Entada* presents seeds so large as to serve for turnery articles. Indigenous and peculiar *Citrus*-trees, up to half a hundred feet high, extend the dominion of the *Hesperides* far south into Queensland. Wondrous for mutual adaptation is the nesting of ants in the root-stocks of the large *Hydnophytum* and *Myrmecodia* Bushes, occurring, however, only far north, and demonstratively a provision of Nature almost mutually as necessary as the symbiosis of a minute peculiar Algæ on our floating *Azolla*. *Ficus colossea*, with stems of monstrous width and enormous abutments, is the "Abbey-tree" of these regions. The *Lagunaria Patersoni* reaches here a height of seventy feet, and a stem diameter of fifteen feet at a yard from the ground.

For variety of phytographic interest, and for intrinsic beauty of its own, we have a real gem among the endless Queensland floral treasures in a *Rhododendron* (*R. Lochæ*) on the very culmination rocks of the Bellenden Ker Mountains, accompanied—and there only—by a magnificent *Vaccinium* (*Agapetes Meinu*), and encircled by a belt of Rush-Lily (*Helmholtzia*). *Rhododendron* occupies here the most southern position in extreme isolation, whereby this genus of horticultural pride establishes some intimate relation of the mountain Flora of Queensland with that of the Himalayas, Siberia, the European Alps, and others of the cool and even coldest portions of the Northern Hemisphere; but Oaks, Roses, and many other plants of *Rhododendron* regions, have been searched for here in vain. *Argophyllum* and *Balanops* connect here the vegetation with that of New Caledonia, and a true crimson-flowered *Embothrium* even with that of South-western America. As regards Pitcher-plants of Asiatic type, namely, *Nepenthes*, two reach North-eastern Australia. *Aldrovanda* with its vesicular leaves is one of the rarest of aquatics.

One of the most magnificent plants of the jungles of North-eastern Australia is the *Freycinetia insignis*, palm-like but somewhat climbing in habit, and producing flowers with large rosy bracts. So far as we are hitherto aware, epiphytal Orchids are by no means so numerous in species, or so showy in flowers, as might have been expected, considering that all the requirements for their copious and luxurious development are afforded; nevertheless we know now about seventy well-marked Epiphytes of this

lovely order of plants, *Dendrobiums* and *Bulbophyllums* being predominant. Bamboos seem even limited to one or two species, while of Palms our records muster as yet hardly twenty for all Queensland, three of the Rattan-tribe (species of *Calamus*), the tall half-silvery Alexandra-palm being of rather wide distribution, but the Alice and the Beatrice



THE AUSTRALIAN GRASS-TREE (*Xanthorrhoea Arborea*).

palm singularly local, whereas *Ptychosperma Cunninghami* comes as far south as Shoalhaven. Palm-Pines (*Cycadeæ*), as perpetuators of a largely bygone vegetation of geologic ages, no longer existing in the living indigenous vegetation of Europe, reach in Australia their greatest and the most varied display in the eastern regions. True to the general characteristics of intra-tropical forests, gregarious trees cede also here mostly to intermingled species of many different orders; thus *Eucalyptus* loses its predominance, but *Dammara*

robusta (the Kauri Pine of East Australia), *Araucaria Cunninghami* and *Cedrela Australis* (our Red Cedar), may still continue to form the mass of timber in some tracts of country, most valuable commercially, and in each case sought where readily accessible; but the large fruited Bunya *Araucaria* (*A. Bidwilli*), with its edible nuts, is still more confined than the Kauri, and much more so than the ordinary East Australian



A LILY-POOL, MOUNT MACEDON, VICTORIA.

Araucaria; indeed the latter has been traced even to the highlands of New Guinea, a significant fact, as it may indicate a geologic antiquity of the Papuan uplands contemporaneous with that of many regions similarly situated in Eastern Australia.

Much might be recorded about the more inland Flora, in which two Eucalypts (*E. miniata* and *E. phœnicea*) with glittering scaly bark, and with blossoms of an orange or fiery-red, impress a highly ornamental character on the landscape, particularly when these Eucalypts are accompanied by the bat-shaped leaves of *Erythrina vespertilio*, or by the two Kapok-yielding *Cochlospermums* with large yellow flowers. Though here, again, the Eucalypts prevail in the tree-vegetation, they do not attain gigantic size, so that the Cajeput-tree (*Melaleuca Leucadendron*), is one of the best and largest among littoral timber-trees, and is, moreover, remarkable as one of the few trees of tall size fit to live in saline soil. The *Abrus* climber, with seeds half red and half black, so widely dispersed through the warm zones of the Old and New World, reaches quite to the north-western tracts of Australia, where Captain Dampier noticed it long since.

Brachychiton trees, some with a complete defoliation for a portion of the year, reach the north-west of the Continent. *Bossiaes* and *Pachynemas* are here flat-branched leafless shrubs; the Henne Dye-bush (*Lawsonia alba*), the Sunn-fibre and Jute-plant (all

plants of commercial value), make their appearance as indigenous, the two latter likewise far towards the south-east.

Quite restricted to the north-west is the Baobab-tree (*Adansonia Gregorii*), wonderful to behold, the grayish smooth stems enlarging to a vast turgidity, so much so that a whole exploring party may find shade and shelter under a single tree, even should it be at the time devoid of its foliage, particularly when the trunk-like ramifications in ample space emanate already from near the base of the stem. Furthermore occurs there the sacred Lotus of the Egyptians, or the Padma of the Hindoos (*Nelumbo nucifera*), though only rarely so far visible with its large white or rosy flowers of inexpressible beauty, a leading food-plant among aquatics of tropic and sub-tropic regions, the only other *Nelumbo* being North American, and yellow-flowered; gorgeous to an extreme are also our two floating water-lilies (*Nymphaea stellata* and *N. gigantea*), in their display of flowers from the purest white to deep blue or rich crimson, a floral grandeur.

A *Eugenia*, with the aspect of a Weeping-Willow (*E. eucalyptoides*), lines many of the river-banks, grateful for the shade it affords, and much esteemed by the nomads of this region for its edible fruit. Still more valuable is the very palatable fruit of the "Nonda;" but that tree extends also far eastward, having been first brought under



A BASKET OF AUSTRALIAN WILD-FLOWERS.

cognizance by the unfortunate Leichhardt, whose fate and that of his companions, often but vainly sought out, remain even now unascertained.

Hibiscus-shrubs and Convolvulus-like *Ipomœas* assume also far west many grand forms. A rather tall Bamboo (*Bambusa Arnhemica*), graces sparingly the banks of the Adelaide

and Roper Rivers, as a solitary representative of this tribe of Gigantic Grasses in our North-west. The Pandanus of the North Coast is identical with the common species of India, the leaves of which are so much used for rough coffee and sugar bags; the Water Pandanus is a smaller species of very graceful habit.

The Australian Flora in its ordinary displays, as well as in its numeric specificity, is grander and richer than that of all Europe; indeed, the number of well-marked species of our flowering plants now known amounts to about nine thousand, and to these, by the researches of the next century, perhaps another thousand may be added to the species described in the *Flora Australiensis*.

A hope is entertained that a history of the local achievements of science in this part of the world will soon be written, when also just tributes can be paid to all furtherers of phytologic research, who here among us worked for the credit of the past and the benefit of future generations. But in grand literary efforts for the Australian Flora three stand pre-eminent in never-fading lustre; of whom the plants on almost every square mile of this Great Southern Land will speak in living words for all ages, transmitting their fame in natural inscriptions of bloom and verdure, commemorating their achievements in forest and prairie, and with their great names we will conclude, namely, those of ROBERT BROWN, GEORGE BENTHAM and JOSEPH HOOKER.

FAUNA.

FROM the date of Dampier's famous voyage to *Terra Australis*, in 1699, the strange fauna of the remote Australian region was a subject of keen interest to naturalists. Dampier's contribution to the knowledge of this fauna was not great, as his opportunities were not favourable, owing to the inhospitable character of that part of the western coast on which he landed; but he appears to have been the first, in 1700, to see a kangaroo or wallaby; he saw also dingoes, or native dogs; the dugong, or Australian sea-cow, already known in Indian and Malaysian seas; remarked on the flocks of white cockatoos, and has some curious observations on a peculiar lizard, which, from his description, is readily recognizable as that familiarly known as the "shingle-back." The scanty store of interesting facts thus obtained was added to by successive expeditions, including those entrusted to Cook, Bougainville, D'Entrecasteaux, Flinders and others, and by the explorations of Arthur Phillip and John White, until, quite early in the present century, a fairly complete knowledge had been gained of most of the novel and striking features in the animal life of Australia and New Zealand.

The interest which the new Australian animals excited was, at first, an interest in their strange external shapes, the peculiar anomalies which, superficially considered, they presented—a quadruped with a beak like a duck and webbed feet; a hedgehog with a long bill and no teeth; a bird without wings; these and other strange combinations excited the wonder of naturalists acquainted with the animal life of the Northern Hemisphere. But the interest did not long continue that of wonder merely. It soon came to be clear that the animal life of *Terra Australis* afforded a very great assistance towards the comprehension of the whole animal life of the globe, to the better understanding of the geographical and geological distribution of animal forms, and of their relationships to one another. It is not

too much to say that, from this point of view, the submersion beneath the sea before historic times of the whole of the North-American Continent, or the whole of Asia, would have involved a less heavy loss to human knowledge in this department of science than the submersion of the comparatively small area of Australia and New Zealand would have done.



AUSTRALIAN BUTTERFLIES.

We frequently hear the remark—"Australia, with regard to its fauna and flora, has lagged behind the rest of the earth; it has become cut off in remote times from other regions, and has remained very much as the rest of the globe was when the separation

took place. Australia is still in the secondary period of animal and plant development." But a comparison of the Australian animals and plants of the present day with the fossil forms of the secondary period, will show that, though such a statement embodies a truth, it is on the whole one-sided and misleading. Living Australian forms throw great light on certain fossils found in European and American secondary *strata*; but Australia is in no sense still in the secondary period. If we examine the Australian



THE BUTCHER-BIRD.

fauna as a whole, we shall find that it presents a number of forms which are especially characterized by their modern character. Frogs, which are, geologically considered, so far as fossil evidence goes, more modern than marsupials, are remarkable for their development, and the number of genera and species represented; we have representatives of most of the families of fresh-water fishes found in other parts of the earth, of most of the groups of modern birds and of reptiles; and we have even some mammals—bats, flying-foxes, native rats and mice—

which have nothing ancient about them. Intermingled, however, with these, are a variety of undoubtedly archaic forms—the marsupials, the duck-bill and spiny ant-eater, the emus and cassowaries, and that remarkable survival, the *Ceratodus*.

There appears to be sufficient evidence that the present faunal (as well as, of course, floral) characteristics of Australia, with this intermixture of ancient with modern forms, were produced somewhat as follows:—The body of land which represented in the secondary period what is now Australia, was, towards the close of that epoch, divided into two portions—an eastern and a western. These two great subdivisions of Australia were separated from one another for a long period in such a manner that there was comparatively little passage of living forms from the one to the other. The western division remained in a state of isolation from other regions, and the secondary forms which had spread to it from other parts of the earth's surface at an earlier period remained almost its only inhabitants, little disturbed by invasions from without, though undergoing a gradual development, through which were evolved, in course of ages, from the primitive secondary forms most of the peculiar families characterizing the existing

Australian fauna and flora. Meanwhile, the eastern division had not remained thus isolated; but had been connected with New Guinea, and, indirectly, with a mass of land represented in modern times only by New Zealand, but at that time much more extensive, and probably having temporary and indirect relationships with South America. Eastern Australia had in this way received accessions of plants and animals from other regions, and thus, though some of the peculiar Australian families may have been evolved in this region from the primitive secondary forms, yet it is reasonable to suppose that, in the presence of invading forms from without, the primitive animals and plants—originally, perhaps, less abundant than in the west—flourished less than there, and perhaps in many instances became extinct. The union subsequently, in the tertiary or early quarternary periods of the eastern and western divisions, brought about a condition of things from which the modern fauna and flora have been derived. Tasmania became separated from the main-land of Australia, and the connection with New Guinea was broken off; New Zealand—its connection with Eastern Australia being lost long before—attained its present restricted size, and isolated position, by the submergence of the mass of land of which it previously formed but a relatively insignificant portion.



SOME NEW ZEALAND BIRDS.

The special features of the present Australian fauna, as regards the Vertebrate or Back-boned Class, which can alone be touched upon here, have been well summarized by Wallace in his "Geographical Distribution of Animals." The chief peculiarities of the

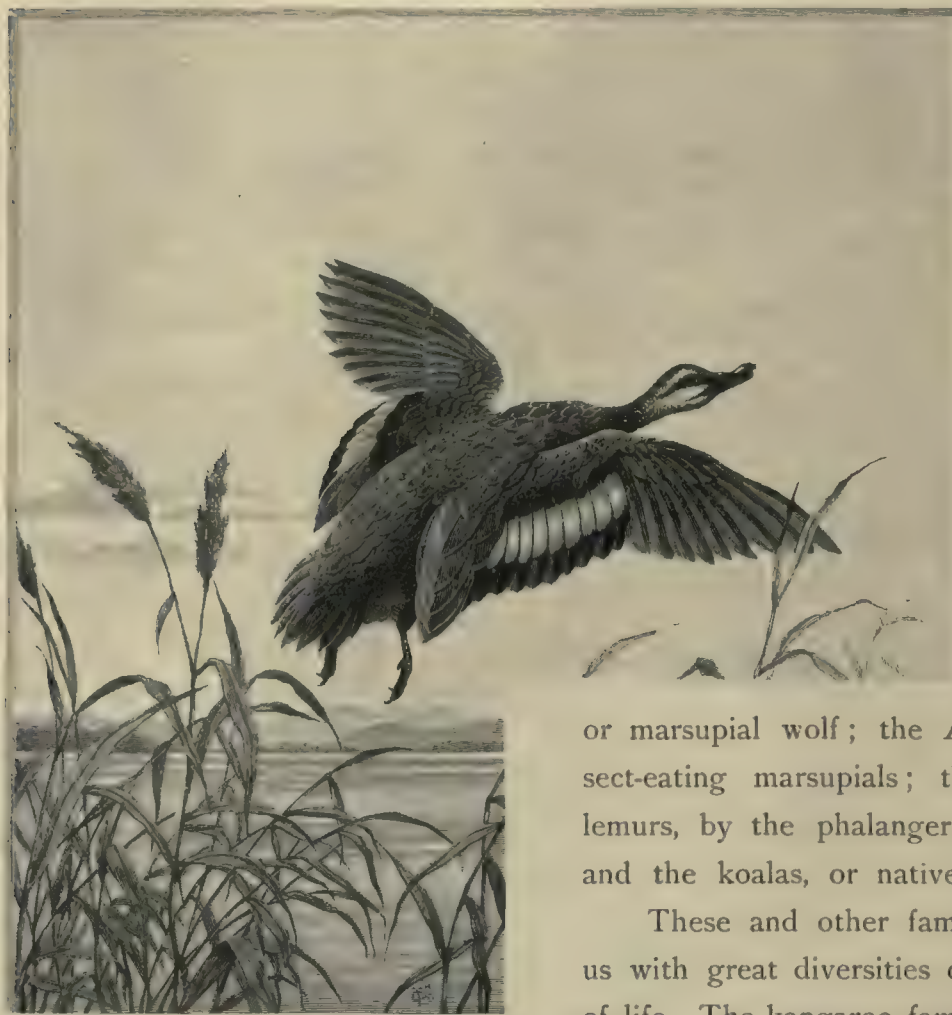
Mammalia may be briefly stated as follows:—The mammals are represented in the Australian fauna almost exclusively by the marsupials—an order represented in other regions only in America, and there only by one family. In addition, the Australian region is characterized by the presence of a remarkable order of mammals—the Monotremes—the lowest of the class, and not represented in any other part of the world. The remainder of the indigenous mammals are very few, comprising only a few bats and flying-foxes, a limited number of species of rats and mice, and the Dingo or native dog.



THE WOMBAT AND THE PLATYPUS.

The marsupials, then, are the characteristic Australian mammals. For though, as remarked above, marsupials are not entirely confined to the Australian region—there being one family of marsupials, the *Didelphidae*, or American opossums, inhabiting America—yet they reach here by far their greatest development in numbers and

variety of forms. In the Australian region the marsupials occupy the position taken in the other regions of the earth by the various families of the hoofed quadrupeds or *Ungulata*, the gnawing quadrupeds or rodents, the carnivorous quadrupeds, the ant-eaters, the insect-eating quadrupeds or *Insectivora*, and the monkeys and lemurs. The various



THE BLACK DUCK.

forms of ruminating hoofed quadrupeds, such as the antelopes or deer, may be said to be represented in Australia by the kangaroos and their allies; the beavers and other gnawing animals are represented by the wombats; the true cats and allied *Carnivora*, by the native cats and Tasmanian devils; the jackals and wolves by the thylacine

or marsupial wolf; the *Insectivora* by the small insect-eating marsupials; the arboreal monkeys and lemurs, by the phalangers, or Australian opossums, and the koalas, or native bears.

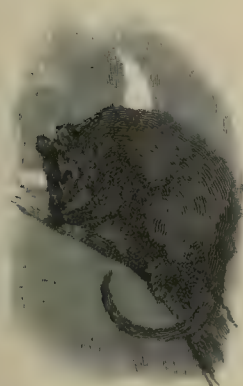
These and other families of marsupials present us with great diversities of external form and mode of life. The kangaroo family (*Macropodidæ*), includes, besides the kangaroos proper, the wallabies and pademelons, hare-kangaroos, bettongs, kangaroo-rats and tree-kangaroos. They are all characterized by the great relative length of the hind limbs, which alone are used in locomotion—the animal progressing by a series of powerful leaps with the body in a semi-erect posture. There are only four toes on each hind foot, and of these only two—corresponding to the fourth and fifth of the complete foot, which are very powerful, especially the fourth—are sufficiently well developed to be of much service. The forelimbs are much shorter than the hind-limbs, and are not used in ordinary locomotion, though they are placed on the ground to support the weight of the fore-part of the body, when the animal is grazing. The body is characterized by its great breadth behind, in the neighbourhood of the haunches, and its relative narrowness in front, in the region of the chest. There is a long and powerful tail, which is used to aid in supporting the body when the animal is at rest, and to balance it during locomotion. The head has a shape not unlike that of a doe, with large eyes and moderately developed ears. The whole surface is covered with a soft fur of a brownish or reddish colour, lighter, sometimes almost white, underneath. These animals are the representatives among the Marsupials of the deer, antelopes, and other ruminating or cud-chewing animals of other regions, and like these they are

adapted for swift locomotion over grassy plains, and have the teeth adapted to the cropping and chewing of herbage. The apparatus possessed by the kangaroo for cutting



THE LYRE BIRD.

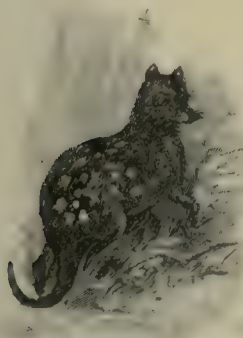
the grass is widely different, however, from that to be observed in the hoofed quadrupeds just referred to; in these the action is similar to that of a chopper—formed by the lower front teeth—pressing the bunch of grass against a pad on the upper jaw and partly dividing it, the grass being finally torn across by a sharp jerk of the head. In the kangaroos, on the other hand, the action is more like that of a pair of shears; this is brought about by a curious arrangement of the lower jaw, each half of which ends in front in a long tooth with a sharp inner edge; the inner edges of these two teeth are capable of being brought into close contact with one another by the approximation of the two halves of the lower jaw, which can be moved sideways. When the kangaroo is feeding, it separates the two halves of the lower jaw so as to open up a space between the two cutting



THE OPOSSUM.

teeth to enclose a bunch of herbage, which is then snipped off, usually close to the ground, by the bringing together again of the two halves of the jaw, a little twisting movement of the head aiding the action and tearing across blades of grass that have not been cut through. The kangaroo-rats and the tree-kangaroos differ somewhat widely in their habits and mode of locomotion from the ordinary members of this family, the former running somewhat after the fashion of a hare, and excavating burrows in the ground, while the latter, which are confined to Northern Queensland and New Guinea, have the limbs so modified as to enable them to climb among the branches of trees.

The marsupials of the family of phalangers, or Australian opossums, are all arboreal animals of nocturnal habits, having the limbs and also the tail, which is long and prehensile, adapted for a life spent for the most part among the branches of trees; they feed on the foliage of the *Eucalypti*, and such wild fruits as they can get, and are very serious enemies to the farmer and horticulturist in districts where they are abundant.



THE NATIVE CAT.

brought into close contact with one another by the approximation of the two halves of the lower jaw, which can be moved sideways. When the kangaroo is feeding, it separates the two halves of the lower jaw so as to open up a space between the two cutting teeth to enclose a bunch of herbage, which is then snipped off, usually close to the ground, by the bringing together again of the two halves of the jaw, a little twisting movement of the head aiding the action and tearing across blades of grass that have not been cut through. The kangaroo-rats and the tree-kangaroos differ somewhat widely in their habits and mode of locomotion from the ordinary members of this family, the former running somewhat after the fashion of a hare, and excavating burrows in the ground, while the latter, which are confined to Northern Queensland and New Guinea, have the limbs so modified as



THE WEDGE-TAILED EAGLE.



THE NATIVE BEAR.

Certain of them—the so-called flying-squirrels—have, like the true flying-squirrels, a sort of parachute, formed of an expanse of furry skin, extending between the fore and hind limbs, and enabling them to shoot through the air obliquely downwards from one branch to another. One member of this family—the *Cuscus*—a near ally of the common phalanger or opossum, but with very short ears and a naked tail, extends from Northern Queensland to New Guinea, the neighbouring islands, and to the Celebes; and one of the flying forms—*Belideus*, or the sugar-squirrel—is not only represented by several species on the Australian Continent, but extends also to New Guinea and the Moluccas.

The family of the Koalas, or native bears, has only one member, the *Phascolarctos cinereus*, an animal restricted to the eastern portions of the Australian Continent, of habits similar to those of the phalangers, but less active, of much heavier make, with relatively large head and rudimentary tail. The wombats are large, thick-bodied marsupials, with short and powerful limbs, by means of which they burrow for the roots that

form their food. They have peculiar chisel-shaped gnawing teeth, like those of the true gnawing quadrupeds or rodents, and the skull has a remarkable superficial resemblance to that of such a member of that order as the beaver. The wombats are confined to Australia and Tasmania. The bandicoots are rather slender limbed, burrowing marsupials, of moderate size, with more or less narrow and pointed mouths; they live naturally on roots, but are very destructive to grain and other crops in agricultural districts. In their range they extend nearly over the whole of Australia and Tasmania, and several species inhabit New Guinea. The family *Dasyuridæ*, comprising the native cats and tiger-cats, the Tasmanian devil, the thylacine or



THE EMERALD BIRD OF PARADISE.

marsupial wolf, and the banded ant-eater, contains all the truly flesh-eating Australian marsupials, together with a number of small forms which are more insectivorous than carnivorous. These marsupial *Carnivora* have teeth adapted to the nature of their food, and are distinguished by the swiftness and agility of their movements. The native cats are small cat-like animals. The Tasmanian devil is of about the same height and length as the domestic cat, but is a great deal broader and stronger, and implacably savage. The thylacine, marsupial wolf, or Tasmanian tiger, as it is variously termed, is the largest of the carnivorous marsupials, being of about the size of a retriever; it is dog-like in

shape also, and in the limited districts to which it is now restricted is the cause of much damage to the flocks. Both of these animals are found only in Tasmania, while the native cats occur in all the Australian colonies.

In spite of the great diversity which they exhibit in external form and in mode of life, the marsupials are all connected together, and distinguished from other mammals by certain points in their structure, which, for the most part, mark them as somewhat lower in the scale of animated nature. The most prominent general feature of the marsupials is the pouch, or *marsupium*, from which the name of the order is derived. This is a pouch of skin on the lower surface of the female, in which the teats are situated, and in which the young, born in a very weak and helpless condition, are protected and nourished.

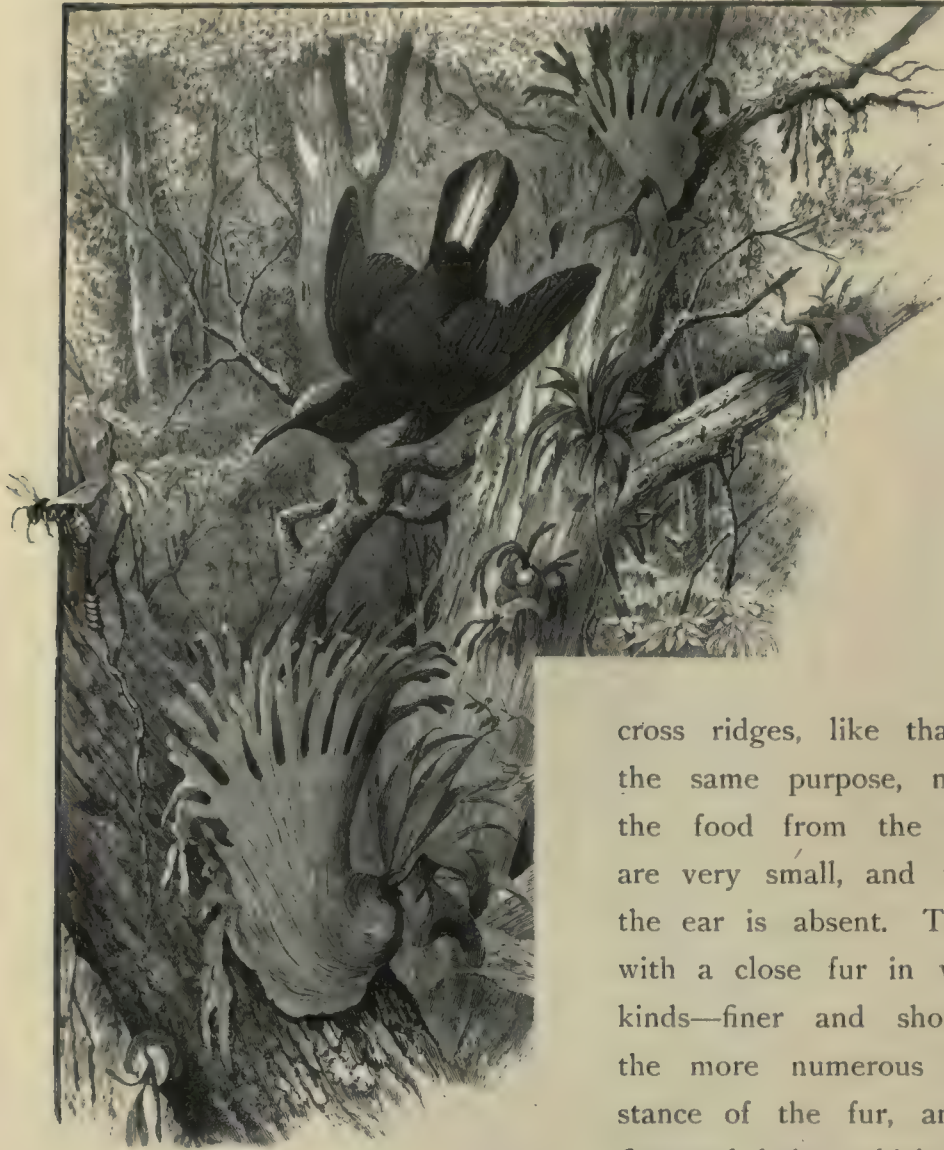
The duck-bill platypus and the *echidna* are the most remarkable of all the Australian mammals. In many particulars of their anatomy they differ from all other members of the class Mammalia, and approach nearer to the reptiles. But they possess those distinctive organs of the Mammalia—the mammary or milk glands which no other animal but a mammal possesses. The milk glands, however, which the *echidna* and platypus possess are of a very undeveloped type, and, though large, they have no teats—the milk passing out through a number of fine pores, which perforate a bare patch of skin, and collecting in a little cup-like depression. Though the platypus and *echidna* thus, in a sense, suckle their young, they yet, unlike all other mammals, lay eggs, the development of which in their early stages resembles that of the eggs of reptiles and birds, rather more than that of the *ova* of mammals. These two peculiar Australian animals together constitute the *Monotremata*, the lowest order of the mammals, not represented either by living, or, so far as our knowledge extends, by fossil forms in any other quarter of the globe.

Though nearly related to one another in their essential structure, the platypus and the *echidna* are widely different in outward appearance and mode of life. The platypus (*Ornithorhynchus paradoxus*), is found in quiet pools, in creeks, rivers, and in lagoons throughout the southern half of Australia. It has a somewhat flattened body with short



LEADBEATER'S COCKATOO.

legs, and, unlike its ally, the *echidna*, a long tail, which in shape is not very unlike that of the beaver, being flattened from above downwards, and clothed with coarse fur. But the most striking part of the platypus is the head, in which the jaws are so modified that they have very much the shape and appearance of the bill of a duck,



THE RIFLE BIRD.

though broader in proportion; they are prolonged and flattened from above downwards, and are covered with a tough and leathery naked skin. At the base of the upper jaw this naked skin forms a free fold or flap, which, when the animal is groping duck-like in the mud, is turned forwards and protects the eyes and the fur of the head from the stirred-up ooze. The palate of the platypus is provided with a number of

cross ridges, like that of the duck, and serving the same purpose, namely, that of filtering out the food from the mud and water. The eyes are very small, and the outer shell or *pinna* of the ear is absent. The whole surface is covered with a close fur in which there are hairs of two kinds—finer and shorter hairs, which are much the more numerous and constitute the chief substance of the fur, and longer and coarser, more flattened hairs, which are scattered over the surface. The legs are short and strong, and the feet

have a remarkable shape, owing to their adaptation to the two functions of swimming and burrowing. The foot is adapted for swimming by having, extending between the toes, a web of leathery skin like the web of the foot of a duck or a swan, but it is also adapted for digging or burrowing by having all the toes, which are five in each foot, armed with powerful claws; when the animal is burrowing the front part of the web of the fore-feet, which is a free flap, can be folded back, so as not to impede the action of the claws. In the male platypus there is to be found projecting inwards from the hind foot a curved and pointed spur, at the apex of which opens a fine canal connected with a gland. The presence of this canal, running from the gland to the end of the spur, leads one to inquire if this spur has a similar function to the poison-fang of a snake, to which it bears a considerable resemblance. Though, however, severe wounds have been produced by the spur, there is no evidence of the occurrence of any specific poisonous action; the spur is probably used by the males in fighting.

The platypus swims and dives with ease, and can remain below the surface for some minutes, searching with its "bill" for its food—insects, earth-worms, shell-fish and fresh-water shrimps—among the mud and water-weeds. The food which it collects under water, by means of its bill, it pushes with its tongue into a pair of pouches on the inner side of the cheeks, until it comes to the surface again to breathe and masticate. For the latter purpose it possesses four horny structures in each jaw, which do duty as teeth and serve to grind up the food: rudiments of true teeth, which appear in the young platypus, never become functional, and disappear altogether in the adult. It frequents burrows in the banks of the streams, with the mouth of the burrow usually below water, and here it deposits annually two eggs, from which the young speedily emerge to be nourished by the secretion of the mammary glands.

The spiny ant-eater, or porcupine ant-eater (*Echidna aculeata* or *Tachyglossus aculeatus*), is a very different looking animal from the platypus. It is of about the same size, with a rather bulkier body, but with no visible tail. The upper surface and sides are armed with numerous long and strong pointed spines, banded with black and yellow. These are modified hairs, and between them, and covering the lower surface and the legs, are ordinary coarse hairs forming a loose fur. The jaws of the *echidna*, like those of the platypus, are beak-like, but much narrower than those of the latter animal; the eyes are small and the *pinna* of the ear rudimentary. There is a long protrusible tongue, by means of which the *echidna* catches the ants that form its ordinary food. The legs are

short and powerful, and armed with strong claws in adaptation to the burrowing habits of the animal. While the platypus is in some danger of early extinction, owing to the esteem in which its fur is held, the *echidna*, now that the aboriginals, who were its chief enemies, are dwindling away, runs little risk of disappearing; owing to its nocturnal habits it is seldom seen, even in districts where it is fairly abundant, usually remaining concealed during the day; while its formidable array of spines, and marvellous celerity in burrowing out of harm's way, make it secure against most assailants. Its rate of increase is very slow, however, as the female lays only one egg annually. This she carries about with her in a temporary pouch till the young one has become hatched, and the young *echidna* remains protected in the pouch until it has attained a considerable size. Besides the common



THE LAUGHING JACKASS.

spiny ant-eaters found in Australia and Tasmania, there is another species found in New Guinea, and there occurs also in this Island a distinct and peculiar genus of spiny ant-eater (*Acanthoglossus*) which differs from its Australian relative, among other points, in the great length of its "bill," and the reduction of the number of the toes to three in each foot.

The bird fauna of Australia is characterized, not only by the presence of some peculiar families not found in other regions, or represented only by one or two stray

species, and by the total absence of certain families generally distributed elsewhere, but in all the great regions of the earth's surface. The families peculiar to the Australian region—having, however, in some cases stray representatives elsewhere, also by the very special development of certain families that occur—are the *Cacatuidæ* or cockatoos, the *Trichoglossidæ* or brush-tongued lorries, the *Platycercidæ* or broad-tailed parrakeets, the *Paradisidæ* or birds of paradise, the *Meliphagidæ* or honey-eaters, the *Menuridæ* or lyre-birds, the *Atrichidæ* or scrub-birds, the *Megapodiidæ* or mound-birds ("scrub-tur-



THE REGENT BIRD.

keys" and "brush-turkeys"), and the *Casuaridæ*, comprising cassowaries and emus.

The cockatoos are a well-known family of birds of the parrot order, comprising a considerable number of species, most of which are natives of Australia. The brush-tongued lorries are honey-eating parrots, with brush-like tips to their tongues, by which they extract the honey from the flowers of eucalypts and other trees and shrubs; they have, like the cockatoos, their head-quarters in Australia, but are represented in some of the islands of the Malay Archipelago. The broad-tailed parrakeets, comprising the familiar "Rosellas" among others, have a similar range. The birds of paradise, distinguished by the richness and gorgeousness of their plumage, are specially characteristic of New Guinea and the neighbouring islands, and are represented in Australia by the rifle-birds, the regent-birds, the manucodes, and by that remarkable and interesting group, the bower-birds. The honey-eaters are, in most parts of Australia, the most numerous

and the most characteristic of the native birds. In size and appearance they vary very greatly, from the little slender-billed blood-birds and spine-bills to the comparatively large friar-birds or leather-heads, wattle-birds and soldier-birds.

The lyre-birds are large birds of pheasant-like shape (though really allied to the perching birds, and not in any way to the pheasants), the males of which, in the case of the *Menura superba*, have a graceful, lyre-shaped tail; they are entirely confined to Eastern Australia. The mound-birds, or scrub-turkeys, are a peculiar family of birds belonging to the same order as that to which the domestic fowls and turkeys belong (the *Rasores*), characterized by their very long toes, and the habit, which they alone among birds exhibit, of burying their eggs among heaps of decomposing vegetable matter which they have themselves brought together, the heat generated by the decomposing mass serving to incubate the eggs. They extend from Australia to the neighbouring islands. The emus and cassowaries are gigantic birds of the ostrich order, with heavy bodies and very stout limbs, and with small wings, which are useless for purposes of flight; they are confined to the Australasian region, the emus being restricted to the Australian Continent.

The *Columbæ*, or pigeons, and the *Alcedinidæ*, or kingfishers, may be mentioned among the families of birds which, although generally distributed over the earth's surface, are more largely represented in Australia than in any other region. The pigeons are represented by a large number of species, some of which are very remarkable, such as the very large and magnificent New Guinea Goura, or crowned pigeon, and the brilliantly-coloured fruit-pigeons, abundant in the warmer parts of Australia, where also the kingfisher has its home; and some of the Australian representatives of



THE AUSTRALIAN PIPING CROW.

this group, such as the great brown kingfisher, popularly known as the laughing-jackass (*Dacelo gigas*), and its allies, are the largest members of the family. The *Podargidæ*, or more-porks, may also be mentioned among the characteristic Australian families, as well as the *Pachycephalidæ* or thick-heads, the *Campephagidæ* or caterpillar-shrikes, and the *Artamidæ* or wood-swallows. The family of the Piping Crows, commonly known in Australia as magpies, is also a characteristic one, finding its head-quarters in Australia. Families of birds that, though well represented elsewhere, are entirely absent in Australia, are the true finches (*Fringillidæ*), the wood-peckers (*Picidæ*), the vultures (*Vulturidæ*), and the pheasants (*Phasianidæ*).

The reptilian fauna of Australia is very large, and all the orders of existing reptiles are well represented. A large proportion of the snakes are venomous members of the family *Elapidae*, a family of wide distribution, found in both America and Asia, and comprising about one-half of the venomous snakes of the globe, with some of the most deadly of all. The death-adder alone, of the Australian venomous snakes, differs from the *Elapidae*, and approaches the Viper family in some respects. The Australian lizards are likewise extremely numerous, most of them, however, being members of well-known fami-



KANGAROO HUNTING IN AUSTRALIA.

lies, such as the geckoes, scinks, monitors, and others; but there are three Australian families that are not found elsewhere, namely, the *Aprasiidae*, the *Pygopidae*, and the *Lialidae*, the two last being remarkable snake-like forms. The order of Reptiles (*Chelonia*), which comprises the turtles and tortoises, is also well represented, and there are three genera of fresh-water tortoises which are not found elsewhere. There are two kinds of crocodiles, the large one (*Crocodilus biporcatus*), commonly, but erroneously, known in Australia as the "Alligator," a species of wide distribution in the Oriental region, inhabiting the mouths of tropical rivers; and the small one (*Philas Johnstonii*), an inhabitant of fresh water, with resemblances to the long-snouted gavials of the Ganges.

Australia is devoid of any representatives of the tailed *Amphibia* (Newts and Salamanders), but the tailless forms are represented by very numerous species of frogs, many of which belong to genera which are peculiar to the Australian region.

A class of fish-like animals—the *Dipnoi*—which connect *Amphibia* with true fishes in some respects, is represented by a remarkable genus—*Ceratodus*—sometimes called the

"Burnett Salmon," occurring in the Dawson, Mary and Burnett Rivers of Queensland; its only near living relatives are the mud-fishes of Africa and South America. The fresh-water fishes present few points worthy of note, except, perhaps, the almost complete absence, among indigenous fishes, of representatives of the family to which the salmon and trout belong, the entire absence of the carp tribe, the occurrence of one peculiar family, the *Gadopsidæ*, and the presence of two families having a remarkable distribution—the *Osteoglossidæ*, or so-called Barramundis, which are found in Queensland, and also in some islands of the Malay Archipelago, in South America, and in Africa, and the *Galaxiadæ*, or mountain-trout, which are found in South America (in the rivers of Terra del Fuego and Chili), and in New Zealand, as well as in Australia.

The most marked characteristics of the fauna of New Zealand, as compared with that of Australia, are the entire absence of marsupials and *monotremes*, and in fact of all mammals with the exception of two bats; the comparative fewness of the reptiles and *Amphibia*; and the total absence of three orders (snakes, tortoises and crocodiles), well represented in Australia; the fewness of the fresh-water fishes; the comparative scantiness of the insect fauna; and the presence of certain peculiar genera of birds. Of the peculiar New Zealand birds the most remarkable is the Kiwi (*Apteryx*), of which there are two species, birds of about the size of an ordinary barn-door fowl, or sometimes somewhat larger, devoid, as far as external appearances go, of any trace of wings, the body covered with long and narrow and almost hair-like feathers, the head terminating in a long, curved beak, and with a pair of short strong legs.

The Kiwis form a family by themselves, their nearest allies, though still very remote, being the cassowaries and emus. Very large ostrich-like birds—the Moas—were numerous in New Zealand until a comparatively recent period, though apparently entirely extinct long before the white man arrived. There are, in the Christchurch Museum, many specimens of the Moa (*Dinornis maximus*), two of which, over twelve feet in height, are really magnificent. There are besides, a number of specimens of various sizes, ranging from that of a small cassowary to that of a camelopard. That Moas were at one time largely distributed in New Zealand may be gathered from the



RETURNING FROM A KANGAROO HUNT.

results of the expedition organized by Dr. von Haast, in the year 1866, for the purpose of collecting specimen skeletons of this gigantic bird. The searchers found Moa bones sufficient to fill a large wain. This scientific enterprise also dissipated the idea, until then almost universally entertained, that the Moa might still be found alive in the well-nigh impenetrable mountain ranges in the south-western portions of the province of Otago. In the years 1887 and 1888, Herr Reischek, the Austrian scientist, spent several months in the same wild region, and was successful in making two additions to the ornithological knowledge of Australasia.

Besides the Moa, another remarkable New Zealand bird is the Kakapo, or owl-parrot (*Stringops habroptilus*), remarkable for its owl-like face, its burrowing and climbing habits, and its total inability to fly, though in possession of fairly well-developed wings. There is also a peculiar large rail (*Notornis Mantelli*), allied to the Australian and New Zealand *Tribonyx*, also incapable of flight.

The only reptiles, with the exception of two sea-snakes, are twelve species of lizards, mostly of genera found also in Australia; but with one very remarkable form—*Hatteria*—possessing certain special characteristics that distinguish it from all other families of lizards. The only amphibian is the single species of frog. On the whole, the New Zealand fauna is more nearly allied to that of Australia than to that of any other region; but it wants many of the most characteristic Australian forms—the marsupials, the *monotremes*, the cassowaries and emus, the peculiar reptiles and fishes; it has some alliances with the fauna of South America, and it has also some very special features of its own.



COMMERCIAL AND INDUSTRIAL.

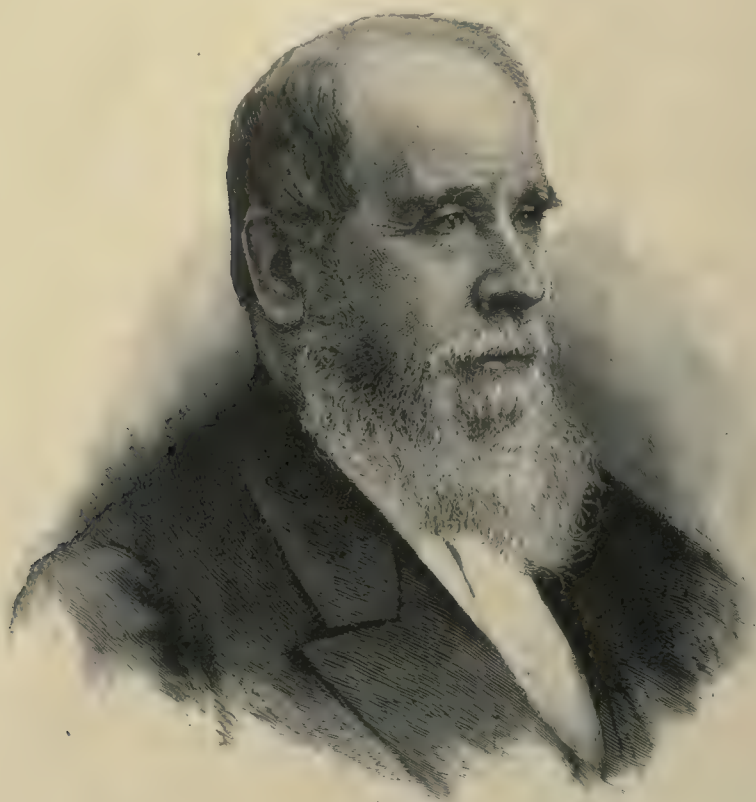
THE MINING INDUSTRY.



THE romance of history contains few chapters fuller of exciting interest than that which records how, for countless ages, Nature had secretly stored up, in an Island Continent, the very existence of which was unknown to every one of the great nations of antiquity, mineral treasures, equalling in magnitude and value anything that even the glowing imagination of an Oriental story-teller had ventured to conceive. And just as the discovery of America coincided with the need for new channels to be opened out, into which the pent-up energies of Europe might be directed, and was followed, in due time, by the revelation of immense mines of gold and silver, the produce of which stimulated and expanded the commerce of the Old World; so the discovery and occupation of Australia in the eighteenth century, was succeeded seventy years afterwards by an exposition of the fact that mineral treasures, as great as those found in Mexico and Peru in the times of Cortes and Pizarro, lay hidden in the soil of the new-found land; and this led, not only to a re-animation of industry by an augmentation of the metallic currency of the Old World, but to a remarkable migration of its redundant population to the fifth Continent of the globe. In brief, when the momentous consequences of the discovery of gold in Australia shall be accurately weighed and estimated a century hence, that incident will be recognized as one of the great turning-points in the progress of the human race.

There has been some dispute as to the person to whom the honour of the discovery is due. Count Strzlecki, as a scientific traveller, noted and reported the geological indications of gold; but the local Government dreaded any discovery, and discouraged any mention of the matter. The Rev. W. B. Clarke, an enthusiastic geologist, also repeatedly noted auriferous indications, but he did not disclose any workable gold-field. A shepherd from the west had brought in a nugget, but it failed to set people searching. The man who actually started the gold-mining industry of Australia was undoubtedly Mr. Edward Hammond Hargraves. He was living near the town of Bathurst, in New South Wales, when the news of the "rush" to the Californian Dorado penetrated to that inland town. He had been well-nigh ruined, as a squatter, by the drought which prevailed between 1844 and 1848, and, with the small remnant of his fortune, he resolved to retrieve his losses, if possible, on the Pacific Slope. In this hope he was disappointed, but he was forcibly struck by the identity of the geological formation of the auriferous regions of

California with that of those districts of New South Wales with which he was most familiar, and he resolved to return thither and prospect for gold. This he did, and in a remote valley, fifteen miles from a human habitation, on the 12th of February, 1851, he and a guide, who accompanied him to the spot, began to dig in a bank of red earth and clay, and to wash out the soil which he suspected was auriferous. His instincts did not deceive him. Gold was found in four of the five panfuls which were operated upon. He prosecuted his researches over a great extent of country, and almost every-where with gratifying results, and more especially so in the vicinity of the River Turon. But when he returned to



EDWARD HAMMOND HARGRAVES.
The Discoverer of Gold in Australia.

Sydney, with several ounces of gold in his possession, his statements were received with incredulity. Nor was it until the Government Geologist had satisfied himself by personal observation, in the valley of the Macquarie, of the auriferous character of the country, that the reality of the benefaction Mr. Hargraves had conferred upon the colony began to be recognized. The sum of £15,000, two-thirds of which were voted by the Legislature of New South Wales, one-sixth by that of Victoria, and the rest contributed by private donors, was not, however, an excessive remuneration for the pioneer of an industry which, since the first discovery of gold

in Australia up to the year 1890, has yielded from the mines of the Continent, with those of New Zealand, 82,444,002 ounces of the precious metal, estimated at a value of £329,776,008—of which the colony of Victoria alone has produced nearly seven-tenths.

Simultaneously with these incidents in the life of Edward Hargraves, there were occurring others, offering a remarkable analogy to them, in that of a mail-coach driver named James Esmond, living at Buninyong, in what was then the province of Port Phillip, and is now the colony of Victoria. He, too, had taken the gold-fever, and had emigrated to California; he, too, had been unsuccessful there; he, too, had been struck by the points of resemblance which presented themselves between the geological structure of the mountain ranges in California and Australia; and he, too, returned to the latter. Landing in Sydney, he heard of the gold discoveries on the other side of the Blue Mountains, and, on getting back to Buninyong, Esmond prevailed upon an acquaintance, named Pugh, to accompany him on a prospecting excursion. On the 1st of July, 1851, they were fortunate enough to discover the precious metal, both in quartz and in alluvial ground, on the banks of the Deep Creek, a tributary of the Loddon. Within a week, prospecting

parties were abroad exploring every district which held out the promise of proving auriferous; and, by the end of the year, the gold-fields of Clunes, Buninyong, Mount Alexander, Ballarat and Sandhurst—or Bendigo, as it was then called—were being explored with such extraordinary success, that half a million's worth of gold was procured by shallow sinking with exceedingly primitive implements. The yield in 1852 was of the value of £10,953,936, and in 1856 it reached its *maximum* in Victoria, for it exceeded three million ounces, and represented a value of twelve million sterling. At that time, the population of the colony was less than a quarter of a million, but immigrants poured in at the rate of ninety thousand per annum; the bulk of them in the prime of life and full of energy, and the area of gold-mining operations became greatly enlarged in consequence. Improved methods of extracting the precious metal, both from

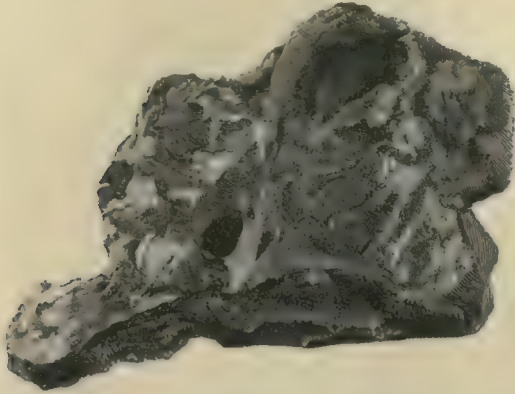


THE GOLD-DIGGINGS AT OPHIR, 1851.

quartz-reefs and from the beds of ancient rivers, were had recourse to; capital and machinery were brought into requisition, and yet—notwithstanding it was ascertained that the auriferous area of the colony was equal to twenty thousand square miles—the yield of gold steadily declined.

It seemed as if, by some mysterious instinct or influence, the earliest diggers were directed to the richest deposits. Not only so, but all the large masses, or nuggets, as they came to be called, were unearthed while the industry was yet young, and they ranged in value from £4,000 up to £10,000. In New South Wales the discoveries of large nuggets were less numerous, and there is no record of more than two having been found exceeding in weight one thousand ounces each. One of these was picked up by a native boy as it was lying amongst a heap of quartz on the surface of the ground at Meroo Creek, on the River Turon, in the year 1851. It had been broken in three pieces by a blow from a pick, and weighed 1,272 ounces; so that its value was not less than £5,000. The other, which was found at Burrandong, near Orange, contained

1,127 ounces of pure gold, and its value at the Mint was £4,389 18s. 10d. There was something very fascinating in the search for gold in the two colonies which had been proved to be auriferous, and where prizes of such enormous value often fell into the



THE "PRECIOUS" NUGGET.

Valued at £6,968.

hands of men who, in some instances at least, where subsisting on the credit afforded to them by a good-natured store-keeper. Sailors who had deserted their ships, Cornish miners, graduates from the British Universities, mechanics, clerks, younger sons of good families, political refugees from Poland, Germany and Austria, and the "landless resolute" from all parts of the world, thrown together upon ship-board, would form partnerships, throw their limited means into a common fund, provide themselves with a digger's outfit on reaching Sydney or Melbourne, and would start off on foot to a gold-field already opened up, or would explore the country in search of a new one. If a particularly rich alluvial lead was struck, the intelligence seemed to be disseminated far and wide by some magical method. Thousands of men came trooping in from all points of the compass. That which a month ago had been a tranquil valley, with a stream flowing through it, and green trees dotting its grassy slopes, was suddenly transformed into a populous encampment, with its stores, its taverns, its lodging-houses, all composed of canvas. Then followed the local newspaper, the tented place of worship, and the theatre and concert-room hastily constructed of planks, and occupied by a travelling company of players. Thus would be formed an impromptu community of twenty or thirty thousand souls—a fortuitous concourse of human atoms—busy as bees all day, and devoting their evenings to such recreations as the place afforded; Sunday being set apart for rest, for religious worship in some cases, and for ablutions and a rough kind of laundry work in all. Some of the richest deposits of alluvial gold were very shallow, and were almost, if not altogether, exhausted in a few months. In that event, the encampment was eventually broken

up and dispersed. Newer fields allured the nomadic population to other districts, and, after they had left, nothing remained of the tented town but the superficial indications of its principal thoroughfares, and a few Chinese "fossicking" for gold in the abandoned holes, or in the heaps of gravel left by the side of them. In two or three mining regions the Asiatics established a quarter of their own; with its brightly decorated Joss-house; its theatre, in which the performance of a single drama would extend over



THE "WELCOME" NUGGET.

Valued at £9,534.

three or four days; its Chinese physician; and its handicraftsmen pursuing their respective occupations in shops that were quaintly Oriental in structure and decoration.

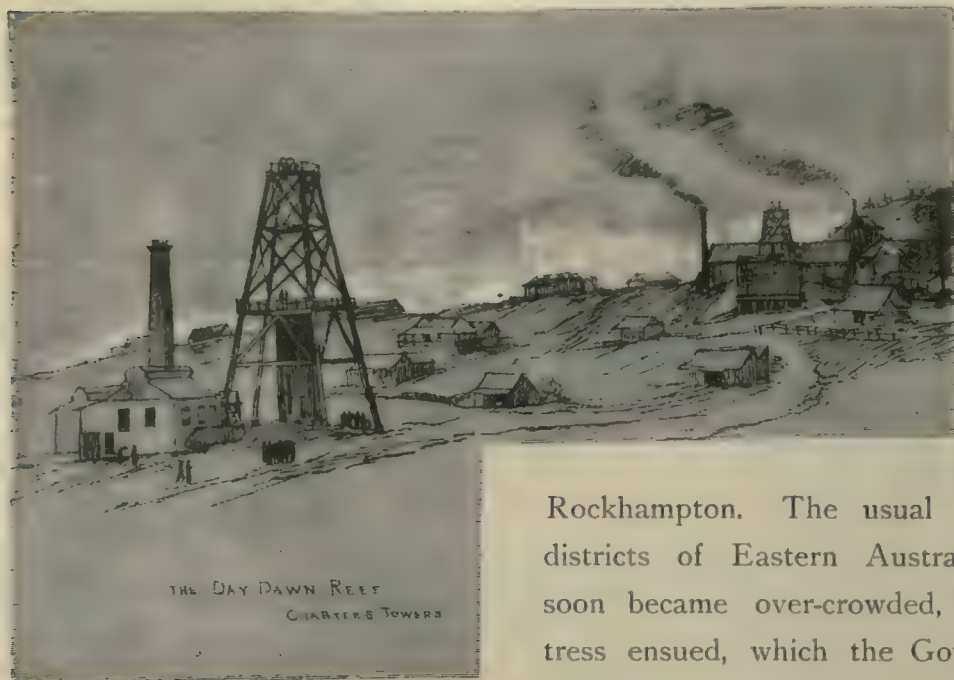
Many of the alluvial deposits of gold were exceedingly rich, and the precious metal was found, in a great number of instances, only a few feet below the surface. As much as one hundred and forty-five ounces have been known to be taken from the bottom of one shaft; and it was by no means an uncommon occurrence for men to wash out ten or twelve ounces from a single tubful of dirt. But, after a time, it seemed as if all these teeming *placers* had been discovered and exhausted; and then arose the necessity for deep-sinking, so as to arrive at the ancient river-beds, or auriferous drifts, which have



"PROSPECTING" FOR GOLD IN AUSTRALIA.

been overlaid in the course of countless ages by successive deposits of clay, sand, basalt and mudstone. This, however, involved the outlay of capital, and the employment of pumping and hoisting machinery; so that mining entered upon a new phase of development; as it did, also, when it was found that the schist rocks of the eastern portions of the continent of Australia were veined with auriferous quartz, which retained its richness at great depths, and could only be hewn or blasted from its position, crushed and manipulated on a large scale and at a very heavy expenditure of money. Hence this great branch of industry is now prosecuted by methods diametrically opposed to those which were pursued by the early digger, who had only to equip himself with a pick and shovel, a tin pan and a cradle. The capital engaged in quartz-mining has now to be estimated by millions; the operations it pursues are of a permanent character, and the crust of the earth has been pierced to a depth of over 2,500 feet.

In Victoria, gold-mining has continued to flourish since the discovery of the metal there, and the total yield of that colony up to 1889 is quoted at 56,282,014 ounces, valued at £225,128,056. The deepest shaft in the colony, Lansell's, at Bendigo, is down over 2,640 feet. In New South Wales, gold-fields have been opened up



THE DAY DAWN REEF
CHARTERS TOWERS

in many places from the extreme north to the extreme south, and even to the far north-west, but none to equal Ballarat or Bendigo. Gold was discovered in Queensland in July, 1858, at Canoona, a place about thirty-five miles distant from

Rockhampton. The usual "rush" from the settled districts of Eastern Australia set in, and the field soon became over-crowded, so that considerable distress ensued, which the Government was called upon to relieve. About nine years later, the Government

decided to encourage the search for gold in the colony, and with that object offered rewards ranging as high as £1,000 for the discovery of workable fields. Several fields were opened up, the well-known Gympie District, a little more than one hundred miles beyond Brisbane, being among them. A nugget weighing one hundred pounds, and worth £4,000, was found here just below the surface. Since then gold-mining has developed in the colony, and has been actively carried on at Gympie, Clermont, Rockhampton, Gladstone, the Hodgkinson, Charters Towers, Normanby, the Palmer, Etheridge and other fields. The famous Mount Morgan mine, which has been already described in dealing with Queensland, is the peculiar boast of the colony in this connection. The yield of gold from 1867 to 1889 from the Queensland mines reached 6,827,888 ounces, valued at about twenty-four million pounds sterling. South Australia has not been distinguished in the same degree as other colonies; though in 1888, 16,763 ounces were raised, nearly doubling the yield of 1886. Copper and silver-lead occupy the place of gold-mining in that colony.

In Western Australia gold has been met with in several places, but until 1886 not in quantities sufficient to pay for working, though the Yilgarn District is now one of great promise. The Government has offered a reward of £500 for the discovery of a payable gold-field within three hundred miles of a declared port, and active search has been prosecuted for some time past. In Tasmania gold-mining has not been inactive. For 1889 the gold was 32,332 ounces, valued at about £120,000. The northern portion of the Island is the richest in this particular, and the Tamar River District has produced the largest finds. In 1883, a nugget weighing a little over 243 ounces was found near Corinna, Whyte River. From 1876 to 1889 the total quantity of Tasmanian gold unearthed was 565,174 ounces. The actual discovery of gold in New Zealand dates from 1861, when a Mr. Gabriel Read found indications at Tuapeka, Otago—though reports of

traces of the metal at Coromandel were heard of as early as 1852. Mining is now extensively carried on throughout Otago and along the west coast; at Te Aroha, where a system of working hydraulic power has been successfully used, the masses of rock being broken by the force of water; at the Grey River; at the Thames, Wairau, Lyall, Collingwood, and other places to which detailed reference has elsewhere been made in the topographical description of the colony. Both alluvial and quartz mining are very extensively carried on; the yield for 1889 was 203,211 ounces, valued at £808,549. Of this by far the largest quantity comes from the west coast. In New

South Wales the output of gold has seriously decreased since 1872, the difference between the value for that year and the return for 1881 being upwards of twelve hundred thousand pounds. The decrease has not been regular every year, however, and the renewed impetus given to quartz-mining about the year last named made the returns higher than for the two years previously, though still below the average for the past fifteen years. In 1890, seventy-five crushing-machines were at work, and one hundred and fifty-three steam engines; 6,285 persons



HYDRAULIC MINING. IN NEW SOUTH WALES.

were engaged on these quartz workings, as against 6,304 in alluvial fields. The total yield from 1851 to 1890 is given as 10,219,815 ounces.

Wherever a gold-field possessed elements of permanence and stability, the habitations erected on its site soon lost their temporary and fragile character. The tent and the slab-hut were replaced by shops and dwelling-houses of brick or weather-board; and these gave way in time to larger and more substantial structures. The irregular encampment was superseded by a well-built town; and in a very few years this expanded into a

handsome city, with its stately town hall, its numerous churches, its well-paved and tree-planted and gas-lighted streets, its schools, markets, theatres, free library and public gardens, and its municipal government administering a revenue of upwards of twenty thousand pounds sterling per annum. To minister to the wants of its population, necessitated the cultivation of the surrounding district, and thus each mining centre became the nucleus of an agricultural and horticultural settlement; and the cultivation of grain and fodder crops, the breeding and fattening of cattle, the grazing of sheep, the growth of fruit and vegetables, and the planting of the vine for wine-making purposes, afforded employment to many hundreds of persons. Manufacturing industries grew up, *pari passu*, with the development of the subterranean veins and drifts of gold. Mining machinery required to be provided, replaced and repaired; flour-mills were established; tan-yards, brick-kilns, tile-factories, breweries, malt-houses, iron-foundries, woollen-mills, soap and candle works, boot and shoe manufactories, and a variety of other industrial enterprises were embarked in; and within thirty years of the period at which the first ounce of gold was dug from the soil of some valley, which had previously been a virgin solitude, a populous and prosperous city had sprung into existence on its site, with nothing to differentiate it from cities of a like magnitude in Northern Europe but the newness of its buildings, the absence of any indications of poverty among its inhabitants, the brightness of its atmosphere, and the general air of activity, energy and vivacity characterizing the great bulk of its population.

Gold-mining in the colonies was, for many years, a very hap-hazard and unscientific proceeding. The news of a discovery usually referred to alluvial gold, and quartz-reefing was a much later development. Lacking capital, the discoverers of gold in quartz had no other resource but to let their treasure lie undeveloped until the necessary means were forthcoming to procure a reefing-plant, crushing machines, and the other requirements of the expensive and often very tedious process of reef-working. It was not until the mining centre had seen its day as an alluvial "diggings" that the era of quartz-mining came in; townships that had once been the riotous scenes of a tumultuous life of excesses on the one hand and toil on the other, where brilliant fortunes had been made and spent, and a seething population had gathered like insects about some teeming ant-bed, relapsed into wildernesses when the surface-workings no longer paid. The days of great finds dwindled down into the dull time when the district was all but deserted, and the few stragglers and Chinese who remained gleaned the scattered ears of the golden harvest, and eked out a precarious living, at little more than labourer's wages, on ground that had once yielded fabulous fortunes. A mining district passing through this stage of its experience presented a dreary spectacle. Here and there among the small areas of cultivation would be seen the bleak spaces that had been turned over by the miner's pick, patches of yellow clay, grass-grown shafts of various depths, deserted huts of dilapidated bark and slabs, and a general air of desolation and decay. The life had passed out of the place, leaving it a shell of its former self, haunted by stories of the wild and picturesque past. Tumble-down rookeries—the remains of the drinking shanties of a time when alcohol flowed like water, and every lucky "find" was celebrated by a carousal in which the curious champagne of the period formed a necessary feature—have, in some cases, been turned into dwellings; a few shop-keepers have re-opened

their quiet doors; a post and telegraph office gives the place a location on the map; and the deserted "diggings" sleeps in the sun and dreams over its past story, with romantic snatches of which any old resident will still astonish the casual visitor. Hereafter, if the conditions favour it, some one will discover that the quartz in the neighbourhood is sufficiently promising to warrant the formation of a company to purchase the requisite reefing-plant, and a new day of prosperity will dawn upon the district. These are the leading lines of the story of most of the more modern gold-fields. The revival of interest in a decayed "diggings" was accompanied by an appeal to the public at large to speculate in shares in the companies formed to carry out the proposed workings, and in this way what may be called the second great mining fever of Australia was made to appeal in a more general and comprehensive way than the first, to the whole of the population. People who had never been on a gold-field in their lives invested largely in claims they never expected to see, and the amount of capital thus put into circulation brought in many places, as it still continues to



A DIAMOND DRILL AT WORK.

bring, substantial returns from the more modern and more scientific methods that wealthy companies, managed by experienced specialists, and worked with the most improved appliances and machinery, were enabled to bring to bear.

Copper was heard of in Australia as early as 1827. On the 20th April, in that year, copper ore was found at the convict settlement at Macquarie Harbour in Van

Diemen's Land, and two years later a similar discovery was announced in New South Wales. But it was in South Australia and Queensland that the richest deposits of this mineral were afterwards to be obtained. In the former colony, copper traces were first obtained by Messrs. Bagot and Dutton, at Kapunda, in 1843. They were able to send ten loads of ore to Adelaide by the first of January in the following year, and its arrival was hailed with the utmost satisfaction by those who saw in the event the first substantial guarantee of ultimate prosperity the colony had yet received. The success of Messrs. Bagot and Dutton incited others to go in search of similar fortune, and the colony had to wait only another year before it was startled by the report of another promising discovery—this time at Burra Burra, on the 19th of May, 1845. The working of the Burra Burra and Kapunda Mines was vigorously proceeded with, and the yield from the former mine alone, during the next thirty years, was stated at 215,132 tons, worth over four millions sterling in value. In 1861, the Wallaroo Mine, Yorke's Peninsula, was discovered by a shepherd on the "run" of a Mr. D. Hughes. Later on, the Moonta Mine was opened, the discovery of copper there dating from 1861; over 255,000 tons of ore were raised from these workings up to 1875, the ore sold realized nearly three millions sterling, and share-holders were paid over £900,000 in dividends. In the space of twenty-five years, upwards of two hundred and ninety thousand tons of ore were taken from the workings, valued at £4,500,000. In Queensland, in December, 1861, a man named John Mollard, who was more popularly known by the name of "One-eyed Dick," discovered what afterwards became the well-known Peak Downs Copper Mine. A Mr. John Manton took up three eighty-acre blocks, and, proceeding to Sydney, at once floated the Peak Downs Copper Mining Company, in December, 1862. The first smelting took place in 1864, and in ten years the total receipts amounted to £268,000. In Western Australia also copper was discovered in small quantities, in 1846. The most important copper workings in New South Wales are situated at Cobar and Nymagee. The former is at present closed, but it will be reopened when the railway, now in course of construction, gives better means of transit. The deepest shaft at Cobar measures 364 feet. The new Mount Hope and Great Central Mines have given excellent indications of payable ore, but their distance from market and the low price of copper of late years have militated against their complete development. Deposits of copper ore have chiefly been found in the central division of the colony, between the Bogan, Darling and Macquarie Rivers; at Walcha, in the New England District; and in the neighbourhood of Burrowa and Carcoar. Up to the end of 1890, the total value of copper raised in New South Wales and exported was stated at £5,818,338. For the year itself, the value reached £275,034; but the highest value obtained for any one year was reached in 1883, when the return was given at £577,201. The falling-off in the return since that time is due, not by any means to the exhaustion of the supply, but to the depreciation of the value in the world's market.

The copper-workings were confined in 1886 to the mines in New South Wales, South Australia and Queensland, but the whole industry in Australia shared in the discouragement of low prices, so that the general yield was beneath that of 1885. Victoria has little to show in the way of remunerative copper-workings. Up to the year 1889 the total amount of copper raised in Victoria was valued at £191,107. The ore has been found

in the Gippsland District, and at Bethanja, Specimen Gully, St. Arnaud, and on the Thompson River, and in smaller quantities near Sandhurst and Castlemaine. In Queensland, the operations have been much more extensive. The richest "finds" in that colony have been made at Clermont, Cloncurry and Mount Perry. Nine hundred tons of ore



THE TIN MINES NEAR EMMAVILLE, NEW SOUTH WALES.

were raised in 1886 in Queensland, valued at £7,000. South Australia heads the list for the same year with a total output of 14,782 tons, valued at £58,538. In 1888 the output was 3,165½ tons, valued at £327,227; by £86,894 less than the value of the output of 1887. The total value of copper and copper-ore produced in Australia to the end of 1889 was £25,058,268.

The principal mines in South Australia are those of Burra Burra, Moonta, Wallaroo; Yudanamutana and Blinman in the North; Poona, Doora, Kurilla, Mount Coffin, Kapunda, Purnamuta and the Victory Mines. Considerably more than half a million tons of ore were taken out of South Australian mines up to the end of 1886. In Tasmania and Western Australia the practical indications of copper have so far been unimportant. New Zealand has shown traces at Port Augusta, Mai Tai, Ducky Sound, D'Urville Island, Nelson, and Paterson's Inlet, but the workings have not been continued payable.

The first mention of the discovery of tin in Australia dates from the 11th of March, 1843, when deposits of ore were found in the Ovens District, now Beechworth, Victoria. Six years later that veteran geologist and fine old colonist, the Rev. W. B. Clarke, met with traces of the metal along the Murrumbidgee, in the Australian Alps, this time within the boundaries of the mother-colony. This report was dated August 16th, 1849. In the same year a Mr. James Dan brought under the notice of a silversmith, who knew something about metallurgy, some specimens obtained by him in the bed of the Broadwater, a tributary of the Severn River. These specimens were declared on examination to be rich samples of the ore. In January, 1854, advantage was taken of the presence in Melbourne of Mr. Storer, geologist of the United States expedition, to have some parcels of ore from the Ovens River analyzed by him. His report was highly favourable, and these circumstances gave an impetus to the working of tin in Victoria, so that by the 1st of September, 1865, it was recorded that the colony had produced two thousand three hundred and eight tons of ore. The rich fields and flourishing workings among the table-lands of New South Wales were not inaugurated until long after this, and it was only on the 5th of October, 1871, that Mr. George Milner Stephen, in a letter to Sir Roderick Impey Murchison, the well-known geologist, spoke for the first time of a promising deposit of tin situate at a place about fifteen miles east of Quorrell. In 1872, the discovery of specimens of the metal was announced in Queensland, and in 1873, the wonderful discovery that has had such an influence on the fortunes of Tasmania was made at Mount Bischoff in that colony, by a Mr. James Smith. The most remarkable tin mines in Australia are that referred to in Tasmania and those in the north-eastern parts of New South Wales. The principal deposits in the latter colony, in the form of stream and lode tin, lie in the neighbourhood of Inverell, Emmaville, Vegetable Creek and Tenterfield. At Poolamacca, in the Barrier Ranges, the ore has also been found. The total value of the New South Wales output up to 1890 is given at £9,255,384; the yield for the year was quoted at £582,496; and the highest value recorded for any one year was in 1882, standing at £833,461. The total for 1886 was 4,968 tons. In Victoria the yield of tin ore for 1889 was 109 tons. That of Queensland for 1886 was 3,153 tons, chiefly from the Herberton District. South Australia contributed no returns; but Tasmania for the same year recorded an output of 5,728 tons. There are some mines in New Zealand which have not yet been extensively worked.

Silver was first discovered in New South Wales at Moruya, but little was heard of the prospects of any profitable mining until 1882. In and after that year an epidemic of silver "finds" broke out in the mother colony, and the lucrative operations at Boorook, in the New England District, at Sunny Corner, near Bathurst, and at Silvertown on the Barrier Range, were rapidly opened up. Smelting was soon carried out on the latest modern principles. The most important silver district in the colony is that at Broken Hill where rapid advances were made between 1884 and 1888. The workings there are now world-famous, the proved length of the lode being two miles. Important discoveries have also been made at the Pinnacle, Umberumberka, and other places in the vicinity; the field covering an area of about 2,500 square miles, along the South Australian border. The most successful mine is that of the Broken Hill Proprietary

Company, whose mine was first discovered in September, 1883, by Mr. Charles Rasp, a boundary-rider on the Mount Gipps Run. Its plant is the most complete of its kind, and the operations are on a gigantic scale, which may be computed from the fact that during the year 1890 it raised 7,921,345 ounces of silver, valued at £1,959,608. During the same period the claims known as Block 14 and the Central Companies' Mines raised respectively 693,563 and 692,985 ounces. Up to the end of November, 1890, the Company had paid dividends to the total value of £2,744,000. A population of some seven thousand per-



THE HOMES OF NEWCASTLE MINERS.

sons quickly settled about this particular mine, and the shares which reached as high as £397, stood in 1888 at £240, representing a capital value of £3,840,000 for this Company alone. The dividend for 1890 amounted to

£592,000. The total population of the Barrier District reached 16,000 persons in 1887, and already demands have been heard for the formation of a separate colony, or for annexation to South Australia. Large silver deposits have also been obtained at Lewis Ponds, Tuena and Mount Costigan; and the Sunny Corner Company paid handsomely in 1886, in which year £160,000 worth of silver was obtained. In the Tumut and Manaro Districts, and at White Rock, near Fairfield in New England, valuable discoveries have also been made. The total value exported from New South Wales up to the end of 1890 reached £6,930,951, the highest yield for any one year being in 1890, reaching £2,762,554. In 1890 the total number of miners engaged in New South Wales silver workings was 5,806 persons. The Victorian silver-mines at St. Arnaud and Bethanga have not been busy of late years, but the recorded output for the colony up to the end of 1888 reached

348,704 ounces. In Queensland the mines are in the Herberton and Ravenswood Districts, and are worked in the usual way in conjunction with lead and galena ore, the yield for 1886 being 1,631 tons of silver and lead combined. Silver was found at Talisker, in South Australia, prior to the great discoveries in 1885 on the New South Wales side of the border, but the workings were discontinued. Tasmania contains silver lodes near Mount Zeehaen which have lately been tested, with results that have been indicated when dealing with that colony. In New Zealand silver in fair quantities has been found mixed with gold at the Thames, Coromandel and Te Aroha, and in 1885 upwards of sixteen thousand ounces were exported.

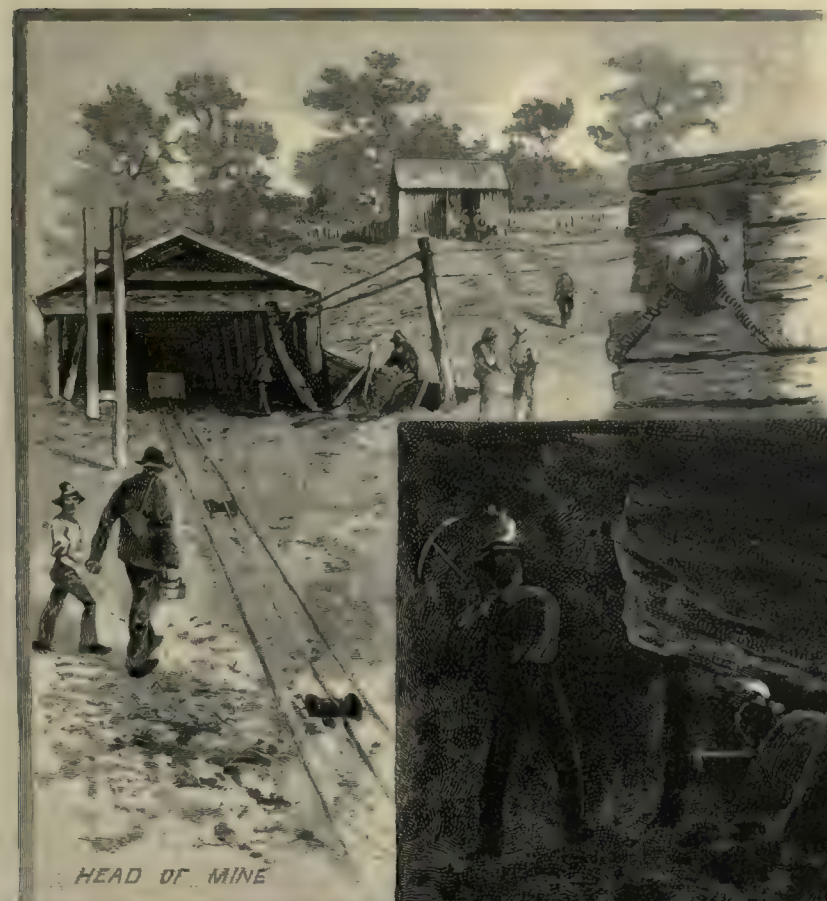
Iron is distributed largely throughout New South Wales. The chief deposits are at Lithgow, Wallerawang, Rylstone, Rydal, Mudgee, Denison, Mount Lambie, Mount Tomah, Berrima, Mittagong, Picton, Mount Keira and Jervis Bay, in the coal range of the Clarence, at Blayney, Lyndhurst, Narrandera, Port Stephens, and in the Bogan River Valley. Works for the manufacture of the ore are situated at Eskbank, near Lithgow, but until recently the smelting of the iron ores of the colony has been found a difficult and costly process, so that the steel and iron imported is almost thirty times greater than the amount turned out of the Eskbank works. The Bessemer process has been introduced to remedy this drawback. The value of iron obtained from ore in New South Wales in 1888 was £23,721. The deposits of iron in the other colonies are comparatively unimportant, because it is only in proximity to coal that iron possesses any commercial value.

Next to that of gold, the coal-mining industry is the most valuable to Australia. The first official mention of the annual output dates from 1829, when the amount was stated at eight hundred tons. Three years prior to that date the newly-formed Australian Agricultural Company received from the Government a grant of one million acres of land, together with a coal monopoly for the Newcastle District extending over a term of twenty years. That wealthy corporation devoted some attention to the development of the mineral resources thus placed at their sole disposal; several workings were begun and a certain profit made. The yield quoted above for 1829 may be regarded as the first tangible profit of this enterprise. In 1847, the Company's monopoly ran out; year by year the importance of the industry was more and more recognized, and, as soon as the field was thrown open to private enterprise, the real value of the coal deposits began to make itself encouragingly apparent. This increase of interest is shown by the figures. In 1847, the last year of the monopoly, the coal yield of the Newcastle District amounted to 40,732 tons, worth £13,750 sterling. Within five years from that date this output doubled itself, and the colliery operations have been advancing in magnitude ever since, the foreign export as well as the local demand steadily increasing. The latest official returns for the year 1890 showed an output for that year of 3,060,876 tons, worth £1,279,088 sterling. The chief seat of the coal-mining industry in Australia is the Hunter River or Newcastle District. The operations here are carried out by forty-nine mines, worked by colliery companies, some of them being the property of English capitalists, though the greater part are owned in the colony.

There are several thousand miners at work in the district, which in many characteristic respects bears a striking resemblance both in appearance, and, of course, in the character of its population, to the coal country in the north of England. The tastes and pursuits of the men are much the same here as at Home. Their life of toil in the pits underground is

lightened by reading-rooms for those who use them, and the usual recreations of a coal-mining population for those who have no bent that way. They are industrious and hard-

working, with neither more nor less than the usual proportion of idlers and *fainéants* of the "ne'er-do-well" type; and now and then, when they become involved in some of their periodical disputes with the "masters" or colliery owners, they suspend work in the



A. H. FULLWOOD

pits and go out on strike for a time. These strikes have usually to do with the question of wages, and they helped the formation of the Northern Coal Sales Association in 1872, which was also partly due to the ruinous results to the coal trade of over-competition among the colliery

proprietors, which, about the year 1869, brought the profit of working down to a very small margin indeed. The proprietors, after a struggle both among themselves and with the men,



COAL-MINING AT NEWCASTLE.

adopted the sliding-scale, adjusting the wages to the fluctuations in price; and then the price was raised from eight to ten shillings per ton. The next strike was caused in 1873 by a dispute between the masters and the men on the question of the number of daily working hours, and here the men were again eventually successful. The price was raised successively from ten to twelve, and then to fourteen shillings per ton by the Association, and, as the trade began to fall off with the rise in prices, it was found that the agreement subsisting between the associated masters and men was threatened by a return to lower prices and wages, and renewed competition in underselling. Then the vend scheme was proposed by the masters, to preserve in some way the balance of property among the collieries, but this was found to have some weak points. Finally, an agreement was come to among a majority of the colliery companies of the district, establishing a new and more stringent vend agreement, fixing the price of coal at the uniform rate of ten shillings per ton once more, with a proportionate increase in the wages of the miners. The rate, at the instance of the miners, was afterwards raised to eleven shillings, at which it has remained. Other strikes have occurred since, notably one in 1888, which at one time seemed to threaten the destruction of the Australian coal trade altogether. The effect had already begun to be felt all over the colonies, but a compromise was happily effected, and the miners returned to work. All the coal-mines in the colony were involved in the great strike of 1890, and coal-production ceased, except for the small quantity raised with difficulty by non-unionist labour. The Illawarra coal-mines have also been very productive, though not to the same extent as those in the Northern District. In 1890, there were sixteen registered mines, spread over the districts of Nattai, Mount Kembla, Mount Keira, Berrima and Bulli. The coal-mines of the Western District are fifteen in number, distributed over the locality of Eskbank, Bowenfels, Lithgow, and the Vale of Clwydd. The wealth of New South Wales in this particular mineral is regarded by experts as practically inexhaustible. The total export for the colony for 1890 has been officially stated at 1,821,874 tons, as against a total for 1880 of 753,356 tons. The total value of the export for 1890 was £987,173 sterling, and the colony numbers the United States, Hongkong, India, Chili and China, besides the adjacent colonies, among its largest customers. The export to Victoria alone, for 1889, was 857,578 tons, valued at £488,344 sterling, while that to the United States was 407,601 tons, valued at £226,956 sterling. The best Australian coal contains less sulphur than the foreign article, and has six per cent. greater specific gravity. The total output for New South Wales for 1888 was 3,203,443 tons, more than thirty-eight per cent. of which was absorbed by domestic consumption. In 1890 ten thousand four hundred and sixty-nine persons were directly employed in the coal-mines of the colony, and for 1889 the increase in the output was 511,220 tons over the preceding year, 1888. It has been computed that the quantity of coal obtained from the mines of New South Wales up to 1890 amounted to a total of 49,812,814 tons, of the sterling value of £24,066,243, and the demand is at present increasing.

Victoria has not yet been so far fortunate as to discover any remarkable payable coal deposits; though the search for them has been actively prosecuted. Four seams were found at Cape Paterson in 1885, the best measuring two feet ten inches, and at Mirboo, a five-foot seam has been struck. During 1889,



HARGRAVES DISCOVERING GOLD.

22,863 tons of coal were obtained in Victoria, valued at about £16,991. In Queensland—the coal resources of which are described by the Rev. Julian E. Tenison-Woods as being enormous—the principal mines are situate in West Moreton District; on the Darling Downs; at Burrum, to the north of Maryborough; at Bowen, Cooktown, and other places. The Government Geologist for the colony speaks in the most enthusiastic way of the future coal wealth of Queensland. The total yield up to the end of 1889 from Queensland was 1,056,283 tons. The output for the year 1889 was



AN OLD-TIME SQUATTER.

265,507 tons, valued at £121,118. Tasmania for 1889, yielded 40,300 tons; its total output to the end of the year 1889 being 141,416 tons. Coal has been worked at Fingal, Mount Nicholas and Douglas River, in the north-east of the Island; at Hamilton, in the centre; at the Mersey, in the north-west; at Jerusalem; and at Gardiner's Bay, about fifty miles south of Hobart, where a four-foot seam has been found. In New Zealand coal has been found in the North Island, at the Bay of Islands, near Newcastle, Maramarua Valley, Whangarei, Waikato; in the South Island at the Grey River, in the Malvern District, Mount Rochfort, Green Island, Clutha Valley, and in the province of Southland. Other deposits have been found in the ranges of the Cape Colville Peninsula, and near Shakespeare Bay.

In addition to the minerals already named, several others have been found in the

different colonies. The most commercially important of these is the Boghead mineral, commonly called kerosene shale. This has been found, more or less, in all the coal-mining districts, but has been principally worked at Hartley, at Berrima, and near Wollongong. The seams vary very much in their quality and thickness, but in the best of them the mineral is superior to any found elsewhere, both in the quantity and quality of the gas obtained from it. The illuminating power of the gas is equal to forty-two standard candles with burners consuming five cubic feet per hour. The shale was first worked at Hartley, with the object of distilling kerosene oil, the price of which at that time was six shillings a gallon. But before all the difficulties could be conquered a superabundant supply of oil from America lowered the price, and the manufacture of illuminating oil in Australia has been a struggle ever since, although the industry enjoys an incidental protection of sixpence per gallon under the operation of the revenue tariff. This shale is very valuable for gas-making purposes, and is shipped at a good profit to many parts of the world. An addition of ten per cent. to the ordinary coal improves the quality of the gas. Paraffine of very good quality is obtained as a by-product from the distillation, and the crude oil is worked up into a useful axle-grease. Several fresh seams of shale have lately been discovered, but the manufacture of oil is carried on only at Hartley, in the west, and at Joadja Creek, near Berrima, in the south. Of other minerals, it may be mentioned that antimony is found in New South Wales, South Australia, Queensland and Victoria; asbestos in New South Wales; bismuth in New South Wales and South Australia; quicksilver in Queensland and New South Wales; manganese in New South Wales, South Australia and Queensland; and spelter in South Australia. Gems have been found in nearly all the colonies, but no distinctly payable diamond-field has as yet been discovered, though the geological indications warrant the hope of such a discovery.

A reference to the history of each colony will show how large a part the discovery of mineral wealth has played in contributing to their prosperity, and in stimulating immigration. In New South Wales, the working of the coal added to the infant commerce of the colony a new and valuable industry, which has never ceased to provide wages for labour and profit for capital. In South Australia, the discovery of copper lifted the colony out of deep despondency, and gave it its second start on the road to wealth. In Victoria, the discovery of gold not only gave the colony an impetus but altered the whole conditions of Australian colonization. In New Zealand, the discovery of gold was the redeeming element after the exhaustion of the Maori War. In Queensland, successive discoveries of gold have carried civilization and settlement right up to the Cape York Peninsula, and round to Croydon at the head of the Gulf. In Tasmania, the discoveries of tin and gold in the northern part of the Island gave fresh life to the colony at a time of extreme dullness; and in New South Wales, though the gold-fields have not been so extensive and permanent as elsewhere, successive "rushes" have had the effect of enticing many miners over from the other colonies who have there settled down. What has happened in the past, will, though under different conditions, happen in the future. Gold is a great magnet, and a great immigration agent, and there is a large unfixed population always ready to move off on the tidings of a new discovery. We may not find any more "Welcome" nuggets; but we may find many more Mount Morgans; and

both geologists and working miners are of opinion that the mineral resources of Australia, so far from being exhausted, have been little more than indicated. There is a great future for mining in Australia, but it will call for science, skill, capital, machinery and organization.

THE PASTORAL INTEREST.

THE first and largest factor in the development of Australia has been the pastoral industry. Many years before the discovery of gold precipitated the scattered settlements into a nation, the growth of wool had established the country on a sound commercial basis. The story of the pastoral industry begins at an early period in the history of Australian settlement. When Governor Phillip arrived in 1788, he brought with him but very little live stock; one bull, four cows, one calf, one stallion, three mares, three foals, twenty-nine sheep, twelve pigs and a few goats comprised the whole of the original flocks and herds. Yet as soon as the settlers had the opportunity of observing the adaptabilities of the country that lay round about them, some of them recognized its suitability for grazing purposes, and very soon a certain amount of interest was taken in the breeding of sheep. Captain John Macarthur stands out as the most prominent in this direction. He began at a very early period to accumulate flocks, and by 1795 he had collected about one thousand sheep. Being an observant man, he noticed that, under the influence of the climate and the pasture, the sheep then in the colony, though of low quality, were already beginning to show an improved fleece, and he saw how the improvement could be expedited if better stock could be imported. In 1796, Cap-



CAPTAIN JOHN MACARTHUR.

tains Waterhouse and Kent were commissioned to proceed to the Cape of Good Hope to procure supplies for the settlement. Macarthur and others gave these Captains a general order to purchase for them some good wool-bearing sheep to mix with their own. On their arrival at the Cape, they found that some sheep out of the famous Escorial flocks, presented by the Spanish Court to the Dutch Government, had been sent there under the charge of a Scotch care-taker, who had died, leaving his

widow involved in some claim on his behalf against the Dutch Authorities. The sheep were, in consequence, for sale, and Kent and Waterhouse purchased twenty-nine of the number. These were brought to Sydney in 1797, but of those who received a share only Captains Cox and Macarthur properly appreciated the value of their acquisition. They devoted considerable attention to improving the staple of wool by crossing the breeds, gradually weeding out the inferior animals and selecting the finer breeds, until they succeeded in producing a fine fleece, and, at the same time, in keeping the original stock pure. When Macarthur visited England in 1803, he took some samples with him, and, before a Committee of the House of Commons, succeeded in making out so promising a case for the future of wool-growing in Australia under due encouragement, that Lord Camden, then Secretary of State for the Colonies, was induced to extend his patronage to him. The scheme he proposed was entered into the more readily as England, just then engaged in the war with Bonaparte, had every interest in making her manufactures independent of Spain, or any other foreign country, for its wool. Lord Camden granted Macarthur ten thousand acres of pasture land for his experiments, the grantee choosing the fertile district known as the Cow-pastures, and naming it after his patron. He returned in his own ship, the *Argo*, in 1805, bringing with him two ewes and three rams from the Royal flocks, and this small stud-flock was for fifty years kept intact; his land grant was afterwards largely extended, and from that time the pastoral industry of Australia may be said to have made a fair start. Of course, Macarthur had no idea of the future which he was founding. He saw only immediate profit. The capacity of the western plains was then unknown, and the pastoral quality of the rest of the Australian territory was still more a mystery. Nobody would have been more surprised than he, had he been told that, in less than a hundred years from the arrival of the first stud ram, the wool export of Australia would amount to more than five hundred million pounds. In the meantime, the trade in wool thus opened up with England furnished a remunerative market for all that the settlement could grow. The importation of fine-woolled sheep continued, and in 1825, Mr. Richard Jones, a Member of the early Legislative Council, brought a superior flock of Saxony sheep to the colony, and other sheep were imported from famous stud-flocks in France and Spain. It was found by Mr. Cox, of Mulgoa, that a more inland climate favoured the growth of a finer fleece, and his experiments on removing still farther inland to Mudgee were attended with so much success as to disclose the value of the western country. The finest merinos were afterwards to come from this district. Meanwhile, it was found that the Australian climate generally caused even the wool of the Spanish sheep to grow softer, brighter, and more elastic, and through thinning it somewhat, made the fleece longer, causing a decided improvement on the whole in the quality.

Although the general statement is true that the Australian climate is favourable to wool-growing, it is a vague one, because the climate of a country covering so large an area must necessarily be very variable. When the fitness of Australia for wool-growing was first discovered, the term Australia meant Sydney, and some thirty miles inland. Now, it means from Sydney to Shark's Bay, and from the Swan River to the Gulf of Carpentaria. The enormous expansion of the pastoral industry has, of course, led to many observations as to the effect of climate and pasture on wool, and to the discovery

of the differences developed in different localities. There is still much more to be learnt, but the breeders have now ceased to try for impossibilities, and are striving to work with Nature, so as to produce the *maximum* results in each separate locality. The original merino type, owing chiefly to climatic causes, became distinctly modified in Australia. The wool lost its harshness, and gained in length and elasticity, but lost somewhat in density. A distinct Australian type was thus formed, and the Australian merino now produces the best wool for manufacturing purposes of any sheep in the world. The size of the animal, too, is found to vary very much with the quality of the herbage, dependent, perhaps, partly on the quantity of limestone in the soil. In



DRYING WOOL AT A RECEIVING DÉPÔT.

some districts where very fine wool is produced, the sheep fall off very much in size. In others, where the wool is coarser, the sheep are large-framed, and make up in the quantity of the wool what they lose in quality. Even the same animals moved from one locality to another will, in a year or two, be found to have increased wonderfully in frame, while at the same time the quality of the wool has undergone a change. As a rule, all excellences cannot be combined, and the best result is either the fullest development of a speciality, or a judicious compromise. On the western slopes of New South Wales the flocks produce a dense fleece of moderate length, great softness and elasticity, and so fine that this wool can be spun into a thread of which one pound will stretch for thirty-five miles. On the rich plains of the Riverina a much deeper growth is obtained, and is now being largely used in America to mix with the harsher and less combing character of wool produced in that country. Still farther to the West, owing to the extreme heat and dryness in the climate, the wool becomes lighter and harsher, and requires a constant change of blood to keep up the degree of excellence already attained. Rams from the cooler hill-country, or from Tasmania, are annually imported. Fencing-in the sheep-runs, and subdividing them into large paddocks, has had a

decidedly beneficial effect upon the wool, and many millions sterling have been spent by the sheep-farmers in thus fencing-in land of which they are only tenants. When sheep are shepherded, it is necessarily in large flocks, owing to the high price of labour. They consequently feed in the cloud of dust that they raise, and this is more particularly so when they are closely packed in going from, or returning to, their folds. This dust strikes into the fleece, and eventually finds its way to the skin, thus preventing the yolk, or natural secretion, from rising and nourishing the wool, which consequently becomes dry and perished, and deteriorates in quality.

In Victoria, especially in the central and south-western portions, the climate and soil are particularly favourable to wool-growing, and the stud-stock of the most careful breeders is eagerly sought after at high prices. Tasmania, too, has great natural advantages, and the rams of the best breeders of this Island are briskly competed for. In South Australia the original sheep-farmers, who occupied the country a hundred miles north of Adelaide, have been dispossessed by the advancing army of agriculturalists, and have had to move off to the north and north-west into a drier climate, similar to that of the extreme west of New South Wales. The rain-fall in these districts is sometimes less than five inches in the year. Water has to be artificially provided, and in the absence of grass the sheep feed on salsolaceous bushes, which, however, are nutritive and healthy. In extreme seasons there is often great destruction amongst the flocks, and these heavy losses check the enterprise of sheep-farmers. Western Australia has not been very favourable to wool-growing, as so much of the soil is light and sandy, but the northern half of the colony promises much better, and is now being occupied by settlers who have had practice and gained experience in the eastern settlements. The sea-board of New South Wales is found by experience to be somewhat too moist for fine-woolled sheep, and more suitable for long wool. In the main, however, this part of the colony is mostly devoted to cattle. In Queensland the climate is warmer, but the southern and south-western half is well adapted for wool, especially in the downs country; in the far North the wool has a tendency to become hairy, and this part of the country seems better suited to cattle. New Zealand, though containing large areas admirably adapted to sheep-farming, has a moister climate than Australia, and has made a greater success in growing long and lustrous wool, as well as in producing sheep of larger carcase, while keeping a fine quality of meat. For this reason, it has succeeded better than any other colony has done in meeting the taste of the English market for frozen mutton. Notwithstanding the severe droughts that have from time to time afflicted all the colonies, and wrought great havoc now and then among the pastoralists, the flocks have continued to increase, and at one time, before the gold discovery, they so outgrew the population that the carcase was of little value. In 1843, Mr. James O'Brien, of Yass, saw that it would pay him better to boil his flocks down for tallow than to sell them at the rates then obtaining in that particular season, with the result that his sheep were in this condition worth from five to eight shillings per head, where they were formerly worth only half-a-crown. This was the beginning of the export of tallow. Some idea of the rate of increase may be gathered from the following figures:—In 1859, Queensland separated from New South Wales, and in 1861, for which year complete returns are available for the mother-colony, the number of sheep within its boundaries numbered 5,615,054; ten years later, in 1871, the number had increased to 16,278,697; in 1881,

the total was 36,591,946; and in 1887, the number of sheep in New South Wales stood at 46,965,152, while the value of the wool-clip reached £9,496,019. The total number of sheep in the whole of Australasia was estimated in 1888 to be close upon a hundred million, of which half were depastured in New South Wales.

It was a singular fact with regard to most of the brave men who took up the hazardous work of early exploration, that their reports on the condition of the country they opened up erred either on the side of the pessimistic or the optimistic, with a decided leaning to the former. In the diaries of the first explorers we sometimes find the brightest descriptions of country which we have since learnt to be comparatively worthless, the discoverer being misled by the accident of the season. At other times we have been told that certain tracts of country were useless for occupation, because the explorer went there during a



SHEEP-SHEARING IN AUSTRALIA.

period of drought, or in the dry season. A more fortunate visitor has given more promising accounts later on, and thus many parts of the colonies that were condemned as useless have—more especially by sinking for and conserving water—become the pasturages of great flocks and herds. Colonel Gawler thought that no wheat would grow north of Adelaide. Mr. Oxley, the Surveyor-General who discovered the Lachlan, and Sir Thomas Mitchell who discovered the Darling, both regretted that such vast tracts should be so utterly barren as to be worthless for man or beast. Neither

knew that though these plains were so devoid of grass, the salsolaceous plants that abounded would prove an invaluable fodder for millions of sheep. The condemnation was the more remarkable in Mitchell's case, because on his trip down the Darling the fattest sheep of the small flock that accompanied the expedition was always killed, and the last



A TAR BOY ON A SHEEP STATION.

sheep was the fattest of the lot. The lesson thus taught was not thoroughly learnt till some years afterwards. Cattle thrive well in Australia, though the country is not so specially adapted for them as for sheep. The stock was of poor quality in the early days, because in the small wooden vessels then used, it was costly and hazardous to import from England. It was easier to get them from India, and for many years the prevailing colours were black, brown and brindle, inherited from the Indian ancestry. But of late years, large sums have been spent in importing the bluest blood from England, and the progeny of Booth and Bates sires are now to be found in most of the short-horn herds. Tasmania was the first colony to introduce the Hereford into Australia, and this favourite breed is now much sought after, owing to its greater hardihood, enabling it to withstand the severe droughts to which the country is periodically liable, and, being also a more active animal, it can travel from distant pastures to market with comparative immunity from loss. Devon cattle, from their propensity to become wild when turned

out upon large runs, are not in favour; but upon poor and wild country their activity and hardihood make them profitable. Dairy cattle are now receiving much more attention than they did in earlier days, and Ayrshires and Alderneys, if well-bred, bring extreme prices, dairy produce being more profitable than agricultural. Some of the colonies are better adapted for cattle than others; and some parts again, such as the comparatively dry inland plains, are more suitable for sheep than for cattle, while the whole of the coast districts, and the greater portion of Northern Queensland, are better adapted for cattle than for sheep. It is also, as a rule, safer and better to stock new country with cattle than sheep; but while a good deal of the country which is now stocked with sheep is well adapted for cattle, sheep are preferred, as they pay better and are less liable to loss through drought. This accounts for the comparatively few cattle now in Victoria, and also in New South Wales, where the rearing of cattle has very much declined of late, as compared with former years. Previous to 1851, when gold was discovered, more attention indeed was paid to the breeding of sheep, but from that time cattle began to displace the sheep; and in 1861, just after the separation of Queensland, the figures show the value of the former within the colony at

about £7,000,000, while the total worth of the sheep there pastured scarcely reached half that amount. The returns for the year 1889 show a very different condition of things. The value of cattle is quoted by Coghlan at about £8,120,000 for that year; while that of the sheep is quoted at £18,750,000. Since 1875 the number of cattle in the older colony has been regularly declining from over three millions in that year to about one million and three quarters in 1889, the ratio of total value being preserved by the



BOLINDA VALE STATION, LANCEFIELD.

advances in the prices of cattle of late years. Signs are not wanting of a renewed interest in New South Wales, but it is not likely that there will ever be again so great a proportion of cattle as before. The increase for 1889 was quoted at 118,685,

and large numbers have been brought over from Queensland, travelling under the charge of men of the class known as "over-landers." This task of "over-landing" is sometimes a hazardous one, the mobs of cattle being often composed of wild and unruly beasts, and the journey being rendered difficult, sometimes by the rivers in flood that have to be crossed on the way, and at others by the want of water during the periods of protracted drought. The chief breeds of cattle now in the colony are the Short-horn, Hereford, Devon, Black-polled, Ayrshire and Alderney breeds, with their crosses; of these, the greater number are Short-horns, which amount, with their crosses, to 1,031,865, while the other breeds and crosses make up somewhat more than 709,700. The cattle, as a whole, are of a good average quality, as the introduction of pedigree stock, of the breeds named, from England has done, and is doing, much to improve them. Australia has always been famous as a 'breeding-ground for horses. The Australian horse, so well known in India and elsewhere, is descended from an importation of pure-bred Arabs from India in the early days of the colony, and latterly from the

English thorough-bred. These were crossed with the animals of the settlement, and the type developed characteristics suitable to the country as it advanced. Some of these horses would be ridden by stock-men one hundred, or even one hundred and fifty, miles in a day. The pace of the racing-horses is equal to that on the English turf. First-class draught and light-horse sires have also been imported. The draught stock require repeated importation to keep up size and bone, and the climate is evidently not suited



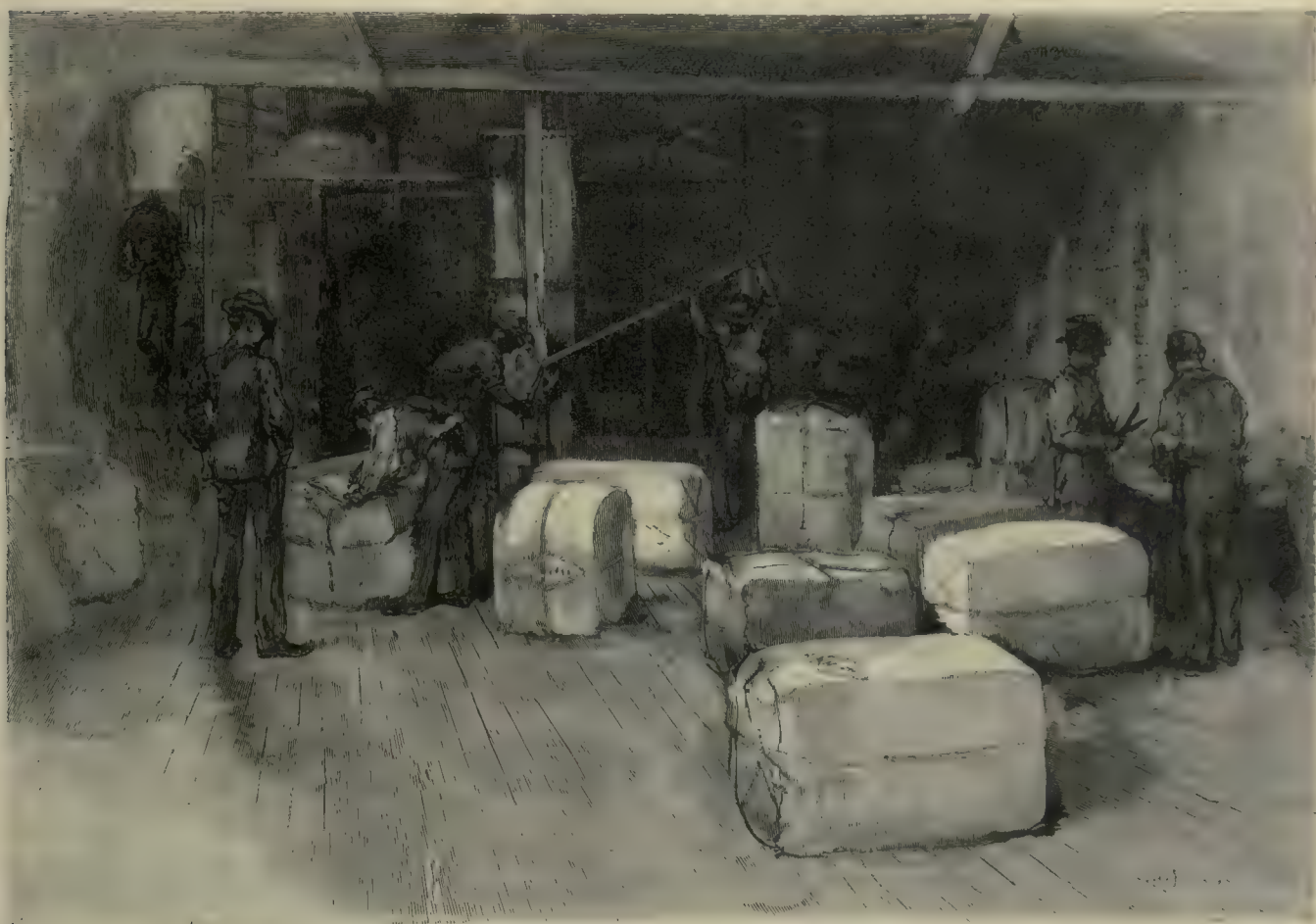
LOADING WOOL FOR SHIPMENT AT SYDNEY.

for them. The lighter sorts are in request for the Indian market, there being regular shipments from different Australian ports. Schemes have been proposed for shortening the sea voyage, by raising horses in Central and Northern Australia; and shipping them from Port Darwin; but this is an industry of the future.

The life of a squatter in Australia has always had a powerful fascination for the minds of those adventurous young men of family or means, who, from time to time,

were led to seek their fortunes at the antipodes. The free life of the open country, the prizes of the calling, its element of romance and adventure in the primeval bush, and even the very ordeal of "roughing it" that the new comer was then obliged to pass through, invested the whole career with just that spice of wild freedom which was most calculated to satisfy the straining youth of the "Old Land" at that period; nothing but life in the American backwoods in the early days could offer a comparison to it. The first steps towards the formation of what has grown up into the squatting interest were made towards the end of the first quarter of the present century, but it must be confessed that the term "squatter" was then accepted as conveying a signification that by no means belongs to it now. In those days, early settlement was confined to a few spots along the coast, and the stock of the colony was carried only on land that had been granted to, or purchased by, the holder. But as the flocks and herds of the settlement increased, the population gradually threw off an erratic element that hung on the skirts of the settlement proper. These enterprising pioneers went farther out and selected suitable spots, well provided with the necessary grass and water, where they

established their camps, and, in short, "squatted down" outside the range of all constituted authority. It can be easily imagined that boundaries were ill-defined, and that the ownership of stock was a little hazy, and that quarrels between neighbours were frequent. As time went on, the example thus set of going farther out was followed by other owners of sheep and cattle, who, finding their flocks and herds increasing beyond all reasonable limits, or the capacity of the country to carry them, were compelled to relieve the pressure by sending a portion of their stock farther afield. The younger sons of the better classes of the colony, as well as the new-comers who had been attracted to Australia by the fascination of the free life under new conditions there, readily entered upon this service. "Squatting" in those days was rougher than it is now.



PRESSING WOOL FOR SHIPMENT.

The railways had not opened up the country, the blacks were troublesome and dangerous, and the dingoes with which the bush was infested—the only wild animals, by the way, that interfered with the shepherd's charge in Australia—at times made great havoc among the flocks. Communication with the settled districts was not frequent, as may be supposed; provisions were often scarce, and the search for good water was not always rewarded with the success that the enterprise of those early days of the pastoralists would seem to have deserved. The old-time squatter was not, as now, the lord of boundless acres, sending his wool to the sea-port every season, and commanding the luxuries of life on his well-appointed station as readily as he might in a first-class hotel. The leaders of these enterprises were in no respects better off than their shepherds or stock-men, and many years had to pass away before their courage in opening up the

interior of the country was to be rewarded with long-delayed success. The chief difficulty of which the early squatters complained, arose from the insecurity of their tenure, and the unfavourable eye with which their undertakings were viewed by the Government. The spirit that led them so far afield was incomprehensible to the official mind of early



AN AUSTRALIAN BOUNDARY RIDER.

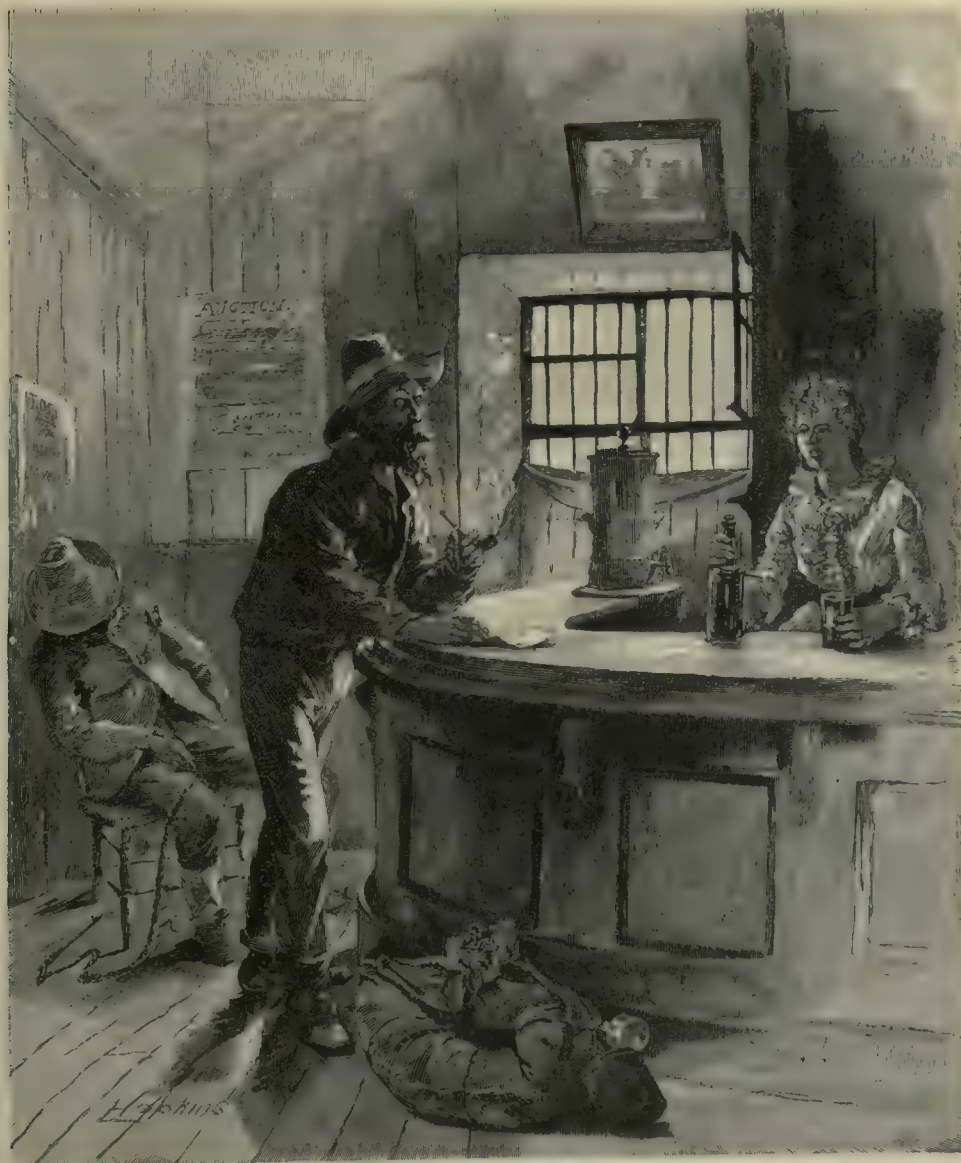
authority, and we find even Governor Bourke complaining in his time of the tendency of the squatters to "wander off beyond the limits of location," while Gipps later on echoed his opposition, whimsically enough as it now seems, "to the people living in bark huts beyond the boundaries." It is not very wonderful that the Government of the day—like that which ruled at the outburst of the gold-mining industry—was perplexed and alarmed at what seemed to be the danger of letting people roam wildly over the whole country. One great difficulty of Government was to keep order, and the great danger was lawlessness. There was a large convict population to manage, amongst whom disturbances and little insurrections had been frequent. Great severity had been used to manage them, even within the legalized limits of a settle-

ment; and how were they to be controlled if they were scattered far and wide? This official anxiety and timidity took no account of the fact that men are much easier to govern when they are engaged in steady industry, and when they are prosperous. The Botany Bay settlement at that epoch was, in truth, pining for a broader life, and when it came, and that, too, in spite of the wish of the Authorities to grant it, the task of Administration became more easy instead of more difficult. All that Government really had to do was to follow the new industry with suitable regulations, and here—as afterwards with the gold—the mistake of the Government was over-regulation. The convicts who went out as servants on the pastoral lands, so far from proving more troublesome, were really more amenable than when confined to the smaller limits of the early settlements. They enjoyed the freer life, they made light of its hardships, and became, for the most part, invaluable helps to the sheep-farmers who employed them. So far from proving adverse to the cause of law, their industry really laid the basis for a new and better social order. The scatter-

ing of the people was, under the circumstances, the one thing necessary to transform a convict camp into a commercial community.

The early squatters were essentially a nomadic race. Like the early patriarchs, they moved on with their flocks and herds as soon as the country grew too small to hold them, or when the land they temporarily occupied, without tenure or title, was sold by the Government to whoever cared to pay the price for it. The graziers themselves were willing enough to buy or rent the land when they found it suitable for their purpose, but the tendency of the officialism of the day was to discourage squatting, and we frequently find the complaint reiterated by the squatter that the Government would not allow him to buy, or rent, or obtain a tenure. As time went on, and the pastoralists acquired wealth and its consequent influence and power, however, their claims began to force themselves on official attention, though not yet in the way the squatters themselves would have preferred to see. Governor Bourke made the first step in this direction, by

acknowledging the legal existence of the squatter to the extent represented by a ten-pound license, though this tax was imposed in the first instance in order to give the Governor power to withhold permission to go upon the land for squatting purposes, in cases where he may have deemed it necessary. Each license covered only a certain area, so that as the limit was extended the squatter had to get a fresh license. Later on, a police tax was imposed on the graziers at their own request. In 1843, the Pastoral Association for the protection of squatting interests was first



A SHEARER "KNOCKING DOWN" HIS CHEQUE.

spoken of in Sydney, when Sir George Gipps passed some regulations which the pastoralists regarded as pressing on their interests unduly. In addition to the license fee and stock assessment, the squatter was now to be compelled to purchase, at stated periods, whether he wanted it or not, three hundred and twenty acres of land at the *minimum* price of one

pound per acre, in order to provide a revenue for immigration purposes, for it was held that the land should pay the expense of bringing an adequate population to Australia. When these regulations were formulated, the squatters lost no time in completing their organization, and it was at this stage that the term "squatter" first began to be applied to the graziers in the sense it now bears. The Association drew up a schedule of claims, which their representatives began thenceforth to advocate, embracing a request for regular leases of their runs, a fixed tenure, and the right of pre-emption. The agitation was carried on vigorously. The squatters carried their influence to England, and, in so short a space of time as lay between the formation of the Association and 1846, they succeeded in getting their claims granted and confirmed by Orders in Council. In 1861, Sir John Robertson passed his Measure in the Parliament of New South Wales providing for free selection before survey; and another for re-establishing the pastoral tenure; and in these two Measures the two great divisions into which the pastoral interests of the Australian colonies class themselves—the squatters and the free selectors—may be said to have received their legal charter.

The land legislation of Sir John Robertson made a great change. Hitherto the laws had expressed the wisdom of Downing Street; now they were made to express the views and feelings of practical settlers, and especially those of the class of small settlers. The Government of the day had not taken much pains to create a body of yeomanry-farmers, and when large grants ceased to be made, and all land was sold by auction, the man who wished to buy a small farm too often found himself over-bid by the squatter on whose run he wished to pitch his tent. To relieve him from this competition, the new law dispensed, in the case of the genuine settler, with auction and even with survey, and also with cash payment. He was allowed to settle where he chose, excepting only on land specially reserved, but he had to mark his boundary in conformity with certain very simple regulations. He was required to pay in cash only five shillings an acre, and he had unlimited credit for the balance, but in return for these privileges he contracted to reside on the land for three years, and to improve it to the extent of a pound an acre. He could transfer only to some one who would take up the conditions. The squatter, on the other hand, lost his general right of pre-emption, but retained the right to purchase one square mile, and any land on which he had put more than forty pounds' worth of improvements. After an experience of several years, this system was found to have developed many consequences which were not intended. The two classes of settlers were brought somewhat into antagonism, the selectors often taking up land simply to be bought off, while the squatters tried to protect themselves by heavy purchases of land at auction, by using their station-hands as dummy-selectors, and by buying up and using the land-orders granted to volunteers for their military service. Alterations have been made from time to time to try to deal with the complaints that arose. The last law divides each run into two parts, giving the squatter a secure tenure of one portion at an increased rental, and leaving the rest, at an annual lease, open to free selection. The auction sale of rural lands has at the same time been limited to 200,000 acres a year. Even this change does not give universal satisfaction, and the land question, in its various phases, continues to be, as it has been from the first, and promises long to remain, a puzzle and a perplexity to politicians.



ERCILDOUNE SHEEP STATION, VICTORIA.

The pioneer days of squatting in Australia are long since over, and the life has lost much of that element of adventure and unrestraint which characterized it in the days when the early pastoralist went forth into unexplored country to seek a location for his flocks. When he found it, he lived there in a very primitive way. The squatter himself had his head-quarters at the home-station, which in those days consisted of what was called the "main hut," generally a structure about forty feet long by twenty broad. This was usually flanked by a deep verandah, made to face the south-east, so that the fierce rays of the mid-day sun might be in some measure guarded against. If there were a woman's hand about the place, which was not often the case in those days of single-handed adventure, a trailing vine might throw the shadow of its green leaves along this verandah, and here it was the custom for the master of the pastures to recline and take his ease when not in the saddle, or otherwise occupied. The roof of the hut was of bark, and at the back, branching off the main apartment, were smaller buildings of the skillion order, which served as store-rooms, and for other purposes of the kind. The squatter's fare was of the simplest. He baked his damper in the ashes, and dined on the mutton-chops his sheep provided, or on the salt beef he had stored in his harness-cask. His black tea and his blacker pipe completed his list of luxuries; and so the old-time squatter lived his life, and laid the foundations of the colossal pastoral fortunes of to-day. The lines of those who came after him have fallen in pleasanter places. The home-station is now a hospitable mansion, graced by the refinements and surroundings of a gentler life and the charm of feminine society. The owner spends as much of his time in one of the colonial capitals as on his "run," and the actual work of the station, which is reduced to a *minimum* by the improved system of more modern times, is usually carried on by a superintendent and his boundary-riders, with the assistance of shearers in the season. The wire-fencing introduced of late years has done away with the necessity for shepherds, and these worthies, once so characteristic a type of Australian bush-life, are rapidly becoming mere relics of the past. The lot of these old shepherds, it must be confessed, was not always a very bright one. They lived solitary lives for nine months out of the year, and many of them saw a human being much seldomer than that, with the exception, indeed, of the driver of the ration-cart who visited them once a week with supplies. Many years spent in the bush had unfitted these men for anything else but shepherding, and so their monotonous life went round without any other than the periodical break which followed the receipt of their wages. These were usually paid by an order on the squatter's agent in the nearest township, after the value of all lost sheep had been deducted—a piece of prudent thrift on the part of the squatter which often left the shepherd without much to spend. The orders were taken to the first bush shanty, to be cashed by the publican. He took possession of the order and supplied the victim with liquor, of which an important ingredient was not infrequently blue-stone, until the funds were supposed to be exhausted. This process was known by the name of "lambing-down," from the publican's point of view, and "knocking down his cheque," from that of the reckless reveller; frequently the process was assisted, more especially of late years, by the wiles of some more or less fascinating barmaid brought up from the city for the season. When the value of the order was supposed to have been covered by the liquor

consumed by the victim—a matter left entirely to the judgment of the publican—he was forcibly informed of the fact; given, perhaps, a bottle of rum and some tobacco, and told to take himself off and come back when he had earned another cheque; and so the shepherd disappeared from view for another year or two, and prepared himself by a course of rigid abstinence and self-denial to be worthy to pass through the same



HARVESTING ON THE WIMMERA PLAINS.

delirious ecstasy of pleasure once more. All this is rapidly passing away now; but there are still bush-shanties and low public-houses where the process of "lambing-down" is carried on, and some still remaining instances of foolish shearers having taken the place of the old-time shepherds who were so eager to "knock

down their cheques." Boundary-riders have now taken the place of shepherds. Shearers are usually small selectors and others, who travel from station to station in the season, at the beginning of summer, and take contracts or engagements for the work of fleecing the sheep preparatory to sending the wool to market. They are paid by the score of sheep passed through their hands, and the more expert among them often earn enough in this way to make their expenses for the year a matter beyond the scope of anxious concern. The sum gained is a handsome addition to the profits of their farms, and indeed without it the selections would often not be tenable. After the shearing, an experienced wool-sorter skirts and classes the wool, arranging it according to its qualities.

The wool at one time was, as a rule, washed on the sheep's back, but now it is principally shorn and sent to market in the grease; and unless it is exceptionally dirty only the "locks and pieces" are now scoured. In scouring on the station the most common mode is to soak the fleece first in large cisterns of hot water and soap, and then plunge it into the river in perforated zinc boxes, men meanwhile stirring the wool with long poles. When the requisite degree of cleanliness is secured, the wool is taken to the drying-ground, where it is spread out in the sun, the portion of the landscape so used looking as if it had received a fall of snow. The wool dries clean and white, and is then pressed into bales for market. There are, however, a good many scouring establishments in the colony where wool sent down in the grease is washed by machinery. On the shearing being finished, the teams come into view, and the bales are stacked upon waggons and conveyed to the nearest railway station, or to some shipping-place on a river. Here, again, a great advantage is possessed by modern wool-growers over those of the old days, when there were no railways and no river steamers, and the teams were often six and nine months, and sometimes a whole year, and more, on the roads.

THE AGRICULTURAL INTEREST.

ONE of the very first duties of the early settlers was to try to make the earth yield its sustenance, and the Home Government was urgent that the settlement should become self-supporting, with respect to food, at the earliest possible date. Seeds had been brought out, and experiments on a small scale were soon made at Farm Cove, at Grose Farm, and at Parramatta. But tillage proceeded slowly, and with many difficulties, and more than one harvest season passed by before the little settlement ceased its dependence for breadstuffs on India. The land in the immediate neighbourhood of Sydney, with the exception of a few patches here and there, is not very favourable to farming; but the discovery of rich alluvial land on the banks of the Hawkesbury, and of good trap-soil at Camden, gave somewhat more encouragement to those who drove the plough. The starting of the sheep-farming industry drew men's attention a good deal away from agriculture, and grain-growing was more attended to in Tasmania than in the metropolitan county of New South Wales. Indeed, it is rather a remarkable fact that the mother-colony has never, during the whole century of its existence, provided itself with breadstuffs. This is partly due to the fact that the settlers have found grazing the more profitable occupation, and partly to the physical geography of the colony. The metropolitan district has not much good arable land, while ranges of mountains cut it off from the fine wheat-lands on the inner slopes. Along the coast wheat can be grown, but the farmers are much troubled with rust and the weevil. The consequence is that in the older colony wheat-growing has met with many discouragements, and it is only within the past few years that the acreage under the plough has been sufficient to give promise of an adequate harvest, and that promise has been spoilt first by drought, and secondly by unseasonable rains. But with a good season, the colony could, and probably would, produce more than enough wheat to make its own loaf. What agriculture there was prior to 1851 was a good deal checked by the discovery of

gold, and wheat was then largely imported from Valparaiso and California. The colony of South Australia was the first to take up the running in wheat production. It had shown what it could do by sending prize wheat from its Mount Barker District to the Crystal Palace Exhibition in London. The local Government, anxious to bring back its



A VINEYARD NEAR SINGLETON, NEW SOUTH WALES.

truant population that had been decoyed to the Victorian gold-fields, established an over-land escort, by which the absentees sent their gains to their wives and children whom they had left behind. Many of them followed, and invested these gains in farms. The Government held weekly land-sales of eighty-acre blocks, and these were eagerly purchased, some by returned diggers, others by capitalists, who leased the land with the right

of purchase—a right often exercised out of the profits of the first, second, or third year. The seasons at that juncture were fairly favourable, the soil was virgin, and the price of wheat was a paying one. Agriculture went ahead, and South Australia became for a



CLEARING LAND BY RING-BARKING TREES.

time the granary of Australia. Since then the industry has received a check, partly because Victoria, the principal buyer, has been producing for itself, partly because the settlers, pushing more and more toward the North, have got into a drier latitude, and have been vexed with harvests that barely repaid the labour spent on them. The average all over the colony has sometimes been as low as four bushels to the acre; but everything has been done to cheapen the cost of production, which, on the whole, is lower there than in any other colony.

In Victoria, after the first effervescence of the gold mania had subsided, and land had been wrested from the squatters, many men, tired of the uncertainties of mining, turned

their attention to farming; and the industry was subsequently encouraged by a protective duty on imported wheat. Victoria now grows more than enough for its own consumption, and what it cannot sell to its eastern neighbours, it has, like South Australia, to send to England. But this distant market yields a poor price to the growers, who are now asking for additional Government encouragement. New Zealand, which abounds in rich land, is a good wheat-growing country, but on account of the greater moistness of the climate, the grain does not carry quite so well on long voyages. But

up to the present time there has been a fairly remunerative market for its surplus in New South Wales and Queensland, where the wheat mixes conveniently in the mill with that which is locally grown.

The rich alluvial lands on the east coast of New South Wales, where the growers, from the first, have had the advantage of easy access to the market, have been largely utilized for the growth of Indian-corn, which is used for horse-fodder. The colony exports largely to its neighbours, and would do so more extensively but for the intercolonial tariffs. Oats are not very much grown in the mother-colony, but they are in New Zealand, Tasmania and Victoria. In the same colonies, barley and hops are also produced, but notwithstanding the brewers' demand, the cultivation has not reached any considerable dimensions. On the eastern coast of Australia considerable attention has lately been given to sugar. Within the limits of New South Wales it was tried on most of the rivers north of Sydney, but it proved to be a commercial failure every-where south of the Clarence and the Richmond. On the rich land bordering these two Rivers it is now an established crop. All along the coast of Queensland sugar grows freely, and the check to the industry is not the want of land, or any defect in the climate, but the want of labour. Sugar has fallen in price to a discouraging point, and the abuses connected with the coloured labour traffic have necessitated so much Government restraint that it is not now easy to work an old plantation, and there is no inducement to establish a new one, and the European labourers cannot work in the cane-brush. But there is an enormous area of rich river-bank land available for cultivation, whenever the labour problem can be solved. If the land on the eastern coast, south of the Clarence, is unavailable for sugar, it has a scarcely less profitable use in dairy-farming; and dairying in Australia has of late made great progress, owing to the mechanical improvements introduced into the business. The separators, the butter and cheese factories, and the freezing apparatus by which



A CHINESE GARDEN IN AUSTRALIA.

butter and milk are carried cool to market, have all given a great stimulus to dairy work, and for this branch of industry the rich alluvial coast-soil is pre-eminently suited.

In a capricious climate like that of Australia, irrigation has naturally been much

talked about, but till lately only a few scattered experiments have been made. But the Government of Victoria sent a Cabinet Minister to Southern California to examine and report upon the irrigation farms there, and one result of his successful visit was that Messrs. Chaffey Brothers, who had gained much experience in irrigation works in that State,



AN AUSTRALIAN "SUN-DOWNER."

visited Australia, and, after a careful examination of the country, established on the River Murray two large irrigation settlements, one in Victoria and one in South Australia. These are now in the initial stage of development, and, if they succeed, they will introduce a new epoch of Australian agriculture. Our land is to a large extent of inferior quality, the rich soil being mostly alluvial, or the *detritus* of igneous rock, and even the rich soil can be profitably tilled only when the produce is within reach of some payable market. The introduction of scientific and systematic irrigation would enable us to bring under tillage all land that can command a supply of water. How much water we can secure, how much land we can treat with it, and to what extent we can meet in price the demand of the world's market, are questions we have yet to answer, but they are questions toward which the mind of the practical cultivator is now set.

As to orchard and vineyard culture, the area available in Australia is indefinite, the extent of the cultivation being simply a question of the cost of production and of profitable sale. But the quality of Australian wine is improving every year, and a successful beginning has been already made with canning fruit for export. In all directions the Australians are doing more than they ever did before to make the land yield its increase.

COMMERCE.

THE essence of commerce is interchange—the export by one country of its surplus to pay for what it can afford to import. The first settlement in Australia was simply a Government penal establishment, and, in the first instance, every necessary had to be supplied. For some years the country could not support itself, and had nothing whatever to pay for imports. The production of wool was the beginning of its commerce; the produce sent away before that time being too insignificant to be worth mention. But the production of wool had in it an unlimited expansibility, and from the day of Macarthur's first shipment until now, the market has never been glutted. Variations in price there have been, and therefore great variations in the wool-grower's profit, but never have the world's consumers stayed the hand of the Australian producer. And wool, which was the beginning of Australia's commerce, is still its greatest support, this

being pre-eminently the greatest wool-producing country in the world. The country most suitable for sheep has, no doubt, been now occupied, but the resources of Australia, as a whole, are by no means fully developed, for in the Northern Territory of South Australia, and in the northern part of Western Australia, there are large tracts of country still to be occupied. The difficulties which have hitherto checked pastoral settlement on these large areas are certain to be conquered, and the commerce of Australia will still grow by the expansion of its original industry.

Its next contribution to commerce has undoubtedly been its mineral treasure. The



THE TRAVELLING HAWKER OF THE AUSTRALIAN BUSH.

export of gold has been large, and though at present somewhat declining, will increase again as scientific and economical mining develops it. Australia has already purchased a great deal by what it has taken out of the bowels of the earth, and will continue for very many years to pay in minerals for those products which for many years to come the Old World will furnish to much greater advantage.

Of agricultural exports there has not been much; first, because the surplus has always been slight; and secondly, because the export price does not give the local farmer very great encouragement. Wheat can be produced more cheaply elsewhere, and at present there is not very much encouragement for producing breadstuffs for the English market in competition with the growers in India, America and Southern Europe.

Something has been done in the way of supplying animal food, but the shipments

of frozen meat and preserved meat have not been so steadily profitable as to open up an unlimited trade. The shippers have often been tried by the rise in price at this end, due to severe droughts, and also by low prices in England consequent on the limited and somewhat capricious market. During the time when the mechanical difficulties of sending meat half round the world were being energetically combated, it was fondly hoped that when the process was made a success, the English demand would expand at such a rate that every available mile of Australian pasture would be quickly brought into use. But this dream has not been realized. All difficulties have been conquered but one, namely, that of securing a steady and satisfactory profit. The trade is still a struggling one, and is kept down to small limits, yet those who are engaged in it are patiently waiting, and not without hope for the future.

Manufactures, Australia is not at present in a position to exchange. For five-sixths of its consumption it is still dependent on the outer world, and its manufacturers have at present no higher ambition than to supply the local market. It will be time enough when that is done to study the markets of the world. But what Australia produces, and can send away to advantage, is already an appreciable item in the world's commerce. In dealing with the different colonies, there has been special reference to the local productions of each, and it will be sufficient, therefore, to say here, that according to the statistical returns for 1887 the gross exports of the whole of the Australian colonies in that year was valued at £50,552,982, while the imports amounted to £57,252,967 for less than 4,000,000 of people.

With the growth of the commerce came a corresponding improvement in the mercantile marine, and vessels not inferior to those engaged in the trade of any other country have been specially built to carry our merchandise. Lines of large steamers give us quick communication with Europe, Asia and America.

In addition to the extra-Australian commerce, there is, of course, a large intercolonial trade. The different colonies have different climates, and certain industries are more developed in some of them than in others. But this intra-Australian trade is much checked by the different, and, to some extent, hostile tariffs of the Australian Colonies. The mother-country granted to each colony full fiscal self-government, and exercised no restraint on fiscal legislation. Uniformity of tariffs, therefore, was never compelled, and has never been secured. This has been partly due to the financial necessities of the different Governments, which have varied very much, according to good or bad seasons, and also according to the expenditure on public works. It has also been caused, to some extent, by a varying attachment to fiscal theories. In Victoria, the policy of protection to native industries was first established, and has been strenuously supported; but in all the other colonies there has been some incidental protection under the revenue tariffs. In New South Wales there has been the nearest approach to a free-trade policy. At the present time, no two colonies have the same tariff, and there are customs' officers on the frontiers of all the colonies on the main-land. The policy of having a customs' union for the whole of Australia is strenuously maintained, but it is, to some extent, in conflict with the desire for local protection, and the adjustment of these conflicting views and interests forms one of the perplexities of the Australian statesman.

Australian commerce is well supplied with every description of mercantile convenience.

The early banks were, of course, started with English capital, and these still hold their own, but as the colonies grew in wealth local banks were established, and have been well supported. The same remark applies to insurance companies; fire, life, maritime and guarantee risks in every form being readily accepted. There is an abundant supply, too, of financial companies, trustee companies, produce and mercantile agencies of every description; and all the forms of doing business customary in Europe and America are adopted with but little alteration. The only foreign bank doing business in Australia is the Comptoir d'Escompte de Paris.

Closely connected with the growing commerce of the colonies has been that part of their public finance which is represented by their indebtedness.

As has been already pointed out, in all the colonies, the great railway works, as well as harbour improvements, bridges and telegraphs, have been undertaken by the Governments. No revenue raised by taxation could have supplied the funds for these works, nor could private enterprise have carried them out, except by importing capital to feed joint-stock enterprise. In either case the colonies would have had to pay the interest to those who had lent the money. Had these great construc-



THE UNION BANK, PITT STREET, SYDNEY.

tive enterprises been held in abeyance, the colonies could not have progressed so rapidly, and the popular impatience would not brook any such delay. All the railways, which in earlier days were constructed by private companies, have passed into the hands of the Governments, and the only private railways now remaining are the Main Trunk Line in Tasmania, and the newly-constructed land-grant lines in Western Australia. There has been an observable and uniform tendency, therefore, for the Governments to become the great constructors of works, which, in England and America, are carried out by private capitalists. The only remaining exceptions are

cases where the Government does not feel itself strong enough to borrow the necessary money. This Australian policy, therefore, which has been so general, which has evidently developed itself under the compulsion of circumstances, and which has been so largely carried out, is a characteristic feature of Australian finance, and must not be overlooked by any one wishing to understand the commercial history of these colonies. Their gross indebtedness amounted in 1889 to £180,000,000, and the debentures thus represented have furnished a very welcome opportunity for investment to English lenders. The growing credit of the borrowers is sufficiently illustrated by the fact that while thirty years ago they had to give six per cent. interest, they can now borrow at three and a half. Over and over again, they have been warned by financial authorities in England that they were borrowing too fast for their population and their rate of progress, but up to the present time each colony has been able to carry its burden; although sometimes rather heavy taxation has been necessary. The two colonies which have borne the pressure the most easily are naturally New South Wales and Victoria, each of which has a million of people, and each of which possesses considerable taxation resources and reserves. The colonies which have most tried their present resources are the younger ones, where the area of occupiable land is large, and where the eagerness to open up the country and promote settlement has been very great. It is well known that, in young colonies, railways which precede settlement are for a time unproductive. Where these railways are made by private companies, the speculators have to wait for their return. Where they are made by the Government, the general revenue has for a term of years to make good the deficit on the railway returns; and if that deficit is considerable, extra taxation may for a time be necessary to meet the requirements. The indisputable advantages of railways are so great that there has been, on the whole, very little dissatisfaction at the outlay. The mistakes made have not been so much in the magnitude of the railway investment, as in the political influence used to control their direction and management; and to meet this difficulty the colonies are, one after another, placing them under the management of independent Commissioners. This arrangement has already given good promise that before many years are over all the Australian railways will be self-supporting. Those in Victoria, where the new system was first begun, have already reached that happy state. The colonial view of the indebtedness is that the English hostile critics look too much at figures and too little at facts. Those on the spot, and who are responsible for the policy adopted, contend that the national investments in railways must turn out right, for three reasons:—first, because the Government, as the part owner of the land, improves its national estates; secondly, because, as the great collector of revenue, it strengthens its fiscal position by developing the resources of the country and increasing the taxable wealth of the people; and thirdly, because, having a monopoly of railway communication, and being therefore free from the risk of ruinous competition, the railways, as a whole, improve as a property every year. It is possible that some of the lines may be badly designed, some constructed in too costly a manner, some too much in advance of settlement; but these mistakes are far more than neutralized by the steadily improving position of the Governments as the great land-owners, the carriers, and the revenue receivers. The only point connected with the national indebtedness

which gives local financiers any concern is that it is nearly all foreign debt, and this has arisen from the fact that money for investment is much more abundant in England than it is in the colonies. In the older colonies some small quantity has been locally raised. In Victoria some portion of the railway expenditure was defrayed out of surplus revenue, and in New South Wales there is a local funded stock at four per cent.; and there have in all the colonies, from time to time, been temporary local loans, in the shape of Treasury bills, to enable the Government to tide over periods of financial trouble. The negotiation of local debt to any large extent has necessarily been checked by the greater cheapness of money in London. The Government could not possibly borrow in the colonies at less than four per cent., and could get only a small quantity at that rate; and the banks and their customers do not favour any large absorption of the local surplus wealth of the Government, as that would check the accommodation given to banking customers. So long as money can be borrowed in England at three and a half per cent., the local Governments will continue to go to the metropolitan market. At the same time, the nominal rate of borrowing is not quite the real rate, as there are expenses for brokerage, agency and remittance, which would not have to be incurred in the colonies. That there is a large amount of what may be considered floating and uninvested capital in the colonies themselves is sufficiently evident from the fact that the gross deposits in the Australian banks amounted in 1887 to £94,000,000. Some of this may have been English capital awaiting investment, but the greater portion represented accumulated colonial wealth not permanently invested, and deposited with the banks pending the discovery of any better occupation for it. These deposits constitute practically the working capital of the banks, for their paid-up capital is small compared with the amount which these financial institutions borrow from one set of colonists to lend to another.

THE RAILWAY SYSTEM.

RAILWAYS and rivers are the two great channels of inland intercommunication available for a people's enterprise. Some countries are, fortunately for themselves, well favoured by the endowment of Nature with one of these aids to development. Australia has not been so fortunate. Our water-courses, with the exception of a few, are neither navigable nor large, and even such as we have are available only under certain circumstances. It is some evidence of our enterprise and determination as a people that, since the sod of the first railway was turned in Australia, a little over forty years ago, we have never relaxed in our persistent effort to link all parts of the eastern side of the Continent together in iron bands. As the beginnings of colonization had their rise in New South Wales, so, of course, had the Australian railway system. And it is important to notice that the beginning was quite in conformity with English ideas. Nearly all our railways are public property, but they began in an attempt at private adventure. The change has not been due to any economical theorising, but to the compulsion of circumstances. The colonists were not rich enough for the work, and English capitalists were not at that time awake to the opportunity, and so what private enterprise began drifted unavoidably into the hands of the Government. Our railway policy has been made for us, rather than by us.

Sixteen years after the opening of the first railway line in England, a public meeting was called in Sydney to discuss the question of railway communication. The idea was well received, and a Committee was appointed to inquire into the railway question and the cost of the construction of an experimental line; and it brought up a report to the effect that a line could be laid from the metropolis to Goulburn at a cost of about six thousand pounds per mile, to yield a net profit of eight per cent. Early in 1848, the survey for the proposed line was completed. A petition was drawn up and presented to the Legislative Council, which referred it to a Select Committee presided over by Mr. Charles Cowper as chairman. On the report of this Committee resolutions were passed by the Council, averring that the time was ripe for the inception of a scheme of railway enterprise. Up to this time no thought had apparently been taken for the interference of the State in the work of construction, and so far was this from the thought of the Committee, that we find a recommendation appended to their report that the Government should offer some premium for the encouragement of private enterprise in this direction. In November, a Provisional Committee was appointed, and a prospectus issued, setting forth the scope of the proposed "Sydney Tram-road and Railway Company," with a capital of £100,000 and a guaranteed interest by the Government for ten years at the rate of five per cent. The scrip of the Company was promptly taken up, although its aim met with a certain amount of opposition, and some difficulty was at first experienced in stimulating the public mind into a practical interest in what was then so novel an enterprise. When the first general meeting of the share-holders was called, in November, 1849, it was found that the affairs of the Company were in fair order and ready for work. By December a survey had been made to Parramatta and Liverpool, and in January of the following year the directors, in their first report, were able to congratulate the share-holders on the prospects of the enterprise in which they were engaged. On the 3rd of July, 1850, the Sydney Railway Company invited the Governor, Sir Charles Augustus Fitzroy, to witness at Redfern the turning of the first sod of the great railway system of the Australian Continent by the hands of his daughter, the Hon. Mrs. Keith Stuart, in the presence of an enthusiastic concourse of spectators. This was a brilliant commencement. But the Company soon found that the heavy drain upon its resources, and the necessarily unproductive expenses they were daily incurring, began to seriously discourage the share-holders and the public, and very soon we find them complaining that the support of the Government was the only thing that continued to hold the nascent enterprise together. The first contract let was for four and a half miles, from Haslem's Creek—now Rookwood—towards Sydney, and the work went on, until the gold discovery and the rush of population to the gold-fields, with the consequent rise in the price of labour and material, compelled the company to release the contractors from their obligations. Another contract was let to carry the work to Ashfield, and thence to Parramatta. Five hundred navvies were imported by the Government, and an additional State loan of £150,000 was obtained on condition that the Government had power to name one-half the directors, who had hitherto been elected by the share-holders. This was the first step towards the Government taking the enterprise over into its own hands. The next step was an intermediate one. In January, 1854, the directors announced at a half-yearly meeting that the cost of the line to

Parramatta would exceed the original estimate, owing to the price of labour and material, from £218,240, as estimated in 1852, to £320,000, besides £97,000 for the Darling Harbour Works. The capital was increased by £100,000, and another loan of £150,000



THE "ZIG-ZAG" ON THE WESTERN LINE, NEW SOUTH WALES.

was obtained from the State on the same terms as before. By January of the following year, the estimate for the Parramatta line had risen to £500,000, and the share-holders were convinced at last that the prospect of a profit on their courageous enterprise had

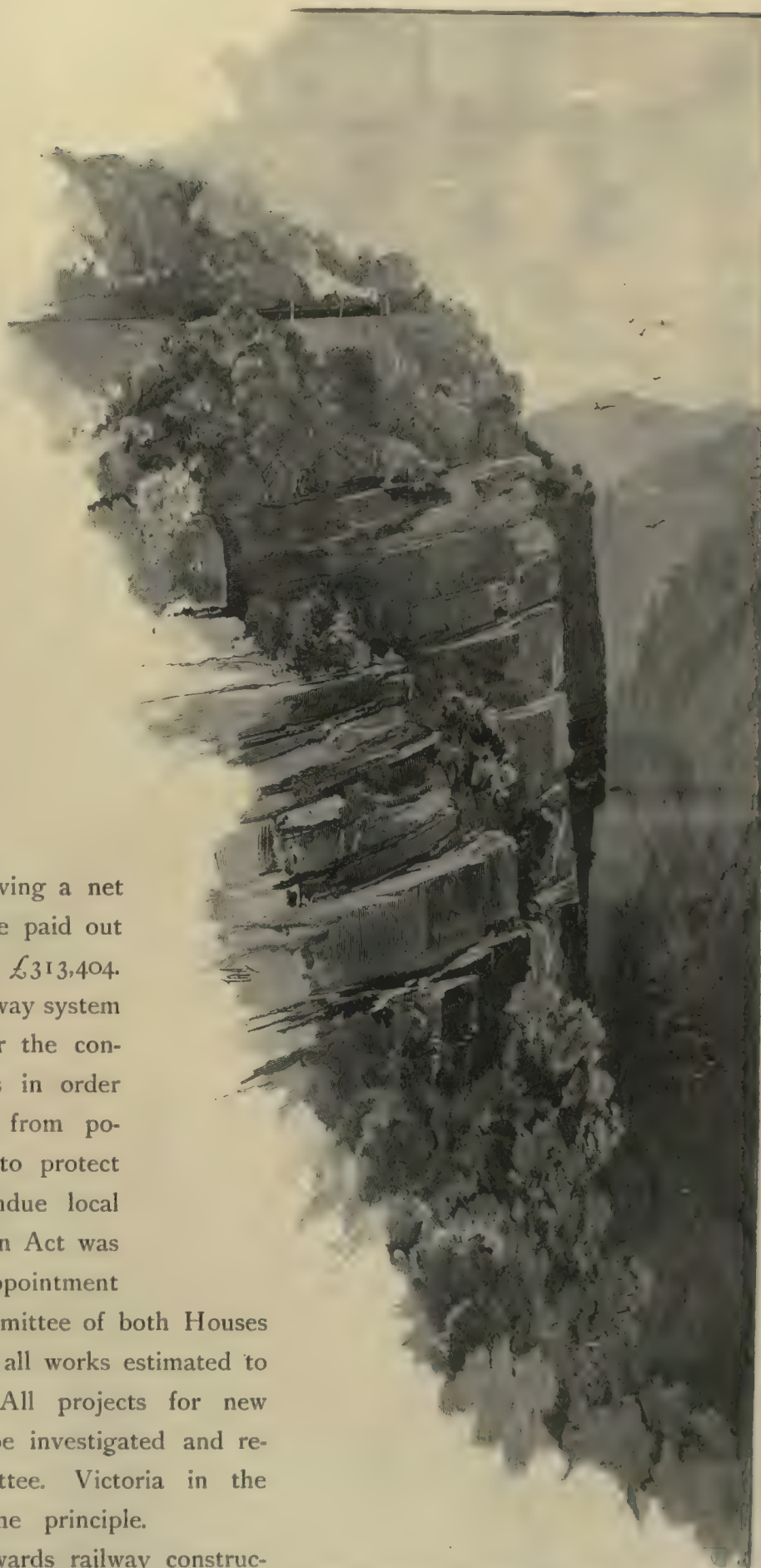
finally disappeared. In 1853, another movement was initiated to carry a railway line from Newcastle to Maitland, a Provisional Committee being formed and a capital of £100,000 subscribed on the spot. In the course of twelve months, however, this Company also found the work beyond their powers; and the inevitable result, that far-seeing people had doubtless foreseen so long, came to pass, in the taking over of the affairs of both Companies by the Government of New South Wales, in September and July, 1854, respectively. More money and renewed vigour were put into the enterprise under State management, and, on the 26th of September, 1855, five years after the first sod was turned, and nine years after the railway project was mooted, the line from Parramatta to Sydney was declared open to traffic, and the Government railway system of the mother-colony was at last practically inaugurated.

But, although the railway system had its inception in New South Wales, it was in Victoria that the first line was opened for actual traffic. The line from Melbourne to Sandridge was not commenced until January, 1853. It was constructed by a private company, and by September of the next year, or about twelve months before the corresponding event in the mother-colony, the line was opened. The first section of the South Australian Railway was from Adelaide to Port Adelaide, and the next was from Adelaide to Gawler, which was opened in October, 1857, the distance being twenty-five miles. In New Zealand, the first line thrown open was at Lyttelton, Canterbury District, on the 1st of December, 1863. Queensland followed, on the 31st of July, 1865, with a line from Ipswich to Toowoomba; Tasmania opened its first section on the 19th of August, 1869; and the first sod of the Western Australian Line was turned by Governor Weld on the 22nd of November, 1874. The progress in all the colonies has been in every way wonderful, when the sparseness of the population and their resources are taken into consideration. In New South Wales, after the opening of the first short line, the work of railway construction languished somewhat for at least twenty years, though only three were allowed to pass without at least some progress being made. Those exceptions were the years 1859, 1865, and 1866. When the two decades had passed, only 437 miles were open in the mother-colony; by 1885 a distance of 1,832½ miles was traversed by the rails; and at the end of 1890 the total length of railway line in the colony reached 2,182 miles, giving an average of about 61 miles per year. To this, is to be added the private line between Moama and Deniliquin, connecting with the traffic from Echuca. The cost of the Government lines up to 1890 amounted to £30,555,123. The routes are known as the Great Northern, Great Western and Great Southern Lines. The first, which for many years had its termination at Newcastle, has now been connected with Sydney by a junction at Strathfield, and one of the great works is the celebrated bridge over the Hawkesbury River. This line taps the Newcastle coal district, the agricultural valley of the Hunter River, the rich pastoral country of New England, connecting with the line to Brisbane on reaching the Queensland border. The Western Line crosses the Blue Mountains over that marvel of engineering skill known as the Zig-zag, and passes on by Bathurst and Dubbo to Bourke. The chief line in New South Wales is the Great Southern Line, branching from the junction at Granville and traversing the southern districts through Goulburn, Wagga Wagga, and the other principal towns on the route to Albury, where a junction is effected with the Victorian Line to Melbourne.

The connection of the two chief cities, the most important feat of railway construction in Australia, was finally effected by a bridge over the Murray at Wodonga in 1883. Besides these main lines there are many subsidiary lines and branches. In 1890, the number of persons carried over the lines in New South Wales was 17,071,945; the tonnage of goods carried being 3,788,950 tons for the same year. The average cost per mile is calculated at £14,003. The interest for 1887 on the total capital expended amounted to £1,663,938, leaving a net deficiency for the year to be paid out of the general revenue, of £313,404. The whole railway and tram-way system has lately been placed under the control of three Commissioners in order to relieve the management from political influence. In order to protect the Government against undue local applications for new lines, an Act was passed providing for the appointment of a joint Parliamentary Committee of both Houses to which should be referred all works estimated to cost more than £20,000. All projects for new railways were therefore to be investigated and reported on by this Committee. Victoria in the year 1887 adopted the same principle.

From the first steps towards railway construction in Victoria, in 1853, the progress was rapid.

A private line to St. Kilda was opened in 1857, and one to Geelong in the same year. The Government constructed at great expense a line from Melbourne to Sandhurst, and another from Geelong to Ballarat. These supplied the wants of the largest gold-fields,



THE RAILWAY LINE AT MT. VICTORIA.

but extensions and branches followed in rapid succession. By 1873, the North-Eastern Line was open as far as Wodonga, on the Murray, though ten more years had to elapse before the junction with the New South Wales system was effected. In 1883, the Victorian Railways were vested by Act of Parliament in a Commission of three, holding office for seven years, and the term has been renewed. By 1887, the colony had 1,880 miles under rail. The total amount spent on the railways of the colony by the Government up to that year was £26,479,206. The return on capital was then equal to about 4.17 per cent., but this profit has since been reduced by unproductive branches. The lines of Victoria comprise the Northern, Western, North-Eastern and Eastern Systems, with branches to nearly every important township. In fact, the central portion of Victoria is the best railwayed part of Australia.

The first sod turned in Queensland, in 1864, was that of the Great Southern and Western Railway Line of that colony. This is carried at a height of 2,600 feet over the Main Coast Range to Toowoomba, and thence southward to the junction with the New South Wales Line to Sydney, at Tenterfield. The system of Queensland, as at present developed, consists substantially of five trunk lines running from ports on the coast to the west and north. Of these, the most southerly is the longest, and the third northerly is connected with a line which has worked south from the head of the Gulf of Carpentaria. In addition to the five trunk lines, there are several subsidiary and connecting ones. The gauge in Queensland is the narrow one, three feet six inches; that of New South Wales, the standard one of four feet eight and a half inches, and that of Victoria, the broad one of five feet three inches. South Australia began with the broad gauge, but all the later lines have been on the narrowest. On both the New South Wales frontiers there is, therefore, a break of gauge. In Tasmania, the Trunk Line has been constructed by an English company on a Government guarantee, but the arrangement being a constant cause of quarrel, an agreement was at last arrived at under which the Government bought out the Company. In New Zealand a great development of railway enterprise was caused by Sir Julius Vogel's great public works and immigration policy, which he devised to give the colony a push after the exhaustion that followed on the Maori War. To satisfy the different localities, many of the lines had to be in the first instance detached, and the links are not yet all filled in. Owing, too, to the physical geography of the country, many of the lines compete with water traffic, and this, by preventing monopoly, keeps down profit. The New Zealand gauge is the narrow one.

THE POSTAL SYSTEM.

THE Postal System of Australasia had its obscure beginning in a small and very unpretentious wooden structure, which stood at the northern end of George Street, Sydney,—or, as it was then called, High Street—near the Queen's Wharf, at that time known as the King's Wharf, in 1810. In that year one Isaac Nichols was appointed Postmaster, with authority to board the vessels entering the Harbour, and collect all letters and parcels entrusted to the master or passengers for persons residing in the infant settlement. It became the duty of the Postmaster to advertise this primitive mail

matter in the newspaper of the day, the *Gazette*, and those concerned learnt through that channel of the arrival of letters addressed to them. The mail matter thus collected was delivered to the early inhabitants at the rate of eightpence for letters, and eighteen-pence for parcels weighing up to twenty pounds avoirdupois; parcels over that weight being charged for at the rate of three shillings. In cases where the letters were addressed to persons living out of town, or in the country—which in those days merely comprised the neighbourhood of Windsor, Parramatta and Newcastle—the care of their delivery was entrusted to the police, or failing that, to any person who might be travelling in the required direction. These were remunerated at the rate of four-



A BACK-BLOCKS POST OFFICE.

pence per letter. Under these exceedingly primitive regulations, a certain method in postal matters and the beginning of a postal revenue were inaugurated in the infant colony. Things went on in this way for nearly twenty years, before the growth of the settlement called for any remarkable development of the system, but by that time it began to be recognized that the condition of the colony was showing signs of change. In 1829, therefore, Governor Darling's Council passed the first Postal Act, establishing a uniform postal rate, and formally constituting the Postal Department of the colony. The lowest rate for inland letters was fixed at threepence, the highest being one shilling, the weight of each letter was one fourth of an ounce, and tenders were for the first time invited for the regular conveyance of mails. Some idea may be gathered of the slow advance in postal matters, from the fact that no response was made to the first appeal for persons willing to take up these early mail contracts, and recourse was had to the services of the mounted police for the purpose. A few of the higher officials of the colony, after the example of the custom obtaining in England, were allowed to frank letters. In the year 1828, the whole postal establishment of New South Wales consisted of the person in charge of the office in Sydney—who began to be known by the title of the Postmaster-General—one clerk, one letter-carrier, and

eight country postmasters. There was also a letter-carrier at Parramatta, who, however, remunerated himself by a charge to the public of one penny on each letter or paper delivered. The difficulty in connection with the conveyance of inland mails was apparently overcome in 1834, since in that year we find the assistance of the mounted police no longer needed, and regular mail contracts in active operation. In 1836, the carrying on of the postal system began to show a loss. A return dated two years before showed twenty-three existing offices, and the expenses of these, with that of the mail contracts and the salaries of a staff of eleven officials in the head office at Sydney, brought the expenditure for the year up to £2,874; the revenue for the same period being £3,735. This financially healthy state of affairs changed very much during the next two years, however, and the postal accounts of the colony have carried forward a yearly deficit ever since. In the year last referred to, 1834, the number of letters dealt with by the Department, in the course of the twelve months, was 190,000, and a total distance of about 2,960 miles had been travelled over in the conveyance of mails. The next year the *minimum* weight of letters was raised to half an ounce, and the rates of postage fixed at from fourpence to a shilling, for distances not exceeding twelve hundred miles. The charge on a single letter conveyed 15 miles was 4d.; 25 miles, 5d.; 30 miles, 6d.; 50 miles, 7d.; 80 miles, 8d.; 120 miles, 9d.; 170 miles, 10d.; 230 miles, 11d.; 300 miles, 12d.; one penny for every additional 100 miles, or part thereof. The farthest point to which internal mails were then carried was Melbourne, for which a special postage rate was fixed at fifteen pence per letter. Even at that early period of the colony's history, the importance of allowing no obviabie restriction to remain in the way of the circulation of knowledge was recognized in the fact that newspapers posted within seven days of publication were transmitted free through the post. When it is remembered that for thousands of people then, as now, sparsely scattered up and down the colonies, newspaper literature is practically the only available channel of communication with the thought and action of the age, the good sense of this regulation will be apparent.

A vessel sailing in the required direction in those days was compelled to carry letters, on payment to the master or owner, of a fee of one penny on each, for owing to the irregularity of communication with the remoter parts of the colony it was found necessary to make use of the first available opportunity that might offer. In 1838, stamp covers were introduced and sold at 1s. 3d. per dozen, and allowed to pass free in Sydney. In 1849, Sir Rowland Hill's great work of postal reform made its benefits felt in New South Wales by the introduction of the pre-payment system by means of postage stamps, relieving the customers of the Post Office of a world of inconvenience. The postal rates were reduced to one penny for town and twopence for country letters, the system of franking was abolished, and the first postage stamps were struck, the original design being a copy of the great seal of the colony. Enthusiastic philatelists now seek for these stamps as treasures for their collections, but of late years they have become exceedingly rare. The inter-oceanic carriage of Australian mails was first spoken of as early as 1834. In July of that year the feasibility of establishing regular mail communication between Sydney and London was energetically discussed in Sydney. In 1844, the first monthly contract packet arrived from the United Kingdom. A difference of opinion

existed as to the route to be adopted, that round the Cape of Good Hope being advocated by one party, while the Red Sea route was pressed by another. The difficulties in the way, the small importance of the colonies at the time, and the conflicting counsels on the subject, relegated the proposal for a time to the region of forgotten projects, and it was many years before the matter was again heard of. In February, 1837, a fortnightly mail was established between Sydney and Port Phillip, the infant settlement there, of course, forming at that time part of the colony of New South Wales. In March, 1846, the subject of steam communication with England was broached in Sydney. The idea was taken up with considerable enthusiasm by many of the principal merchants, who saw at a glance the marked effects such a step could not fail to have on the prosperity of the colony. The question came under the notice of the old Legislative

Council of that day, and the proposal was received with so much favour that no difficulty was experienced in getting a select Committee appointed to inquire into the conditions under which such an enterprise could be carried into effect. That Committee, after careful deliberation and weighing of

the evidence available on the subject as to expenditure and probable returns, recommended the establishment of a postal service between Australia and England, the route suggested being that by way of Singapore. The initiation of this mail service was anxiously looked for by the colonists of the day, whose earnestness in the matter may be gauged by the fact that news at that time occasionally took over five months in transit between England and Australia.

The arrival of the first mail-steamer was a looked-for event both at Melbourne and in Sydney, but it was not until the 23rd of July, 1852, that the steamer *Chusan*,



GATHERING THE MAIL FROM THE PILLAR-BOXES.

from Singapore, by the Leeuwin route, arrived in Hobson's Bay, reaching Sydney on the 3rd of August following. From this stage, postal progress went on more rapidly. In the course of the same year, the Government of New South Wales, from which colony Victoria had by this time separated, offered a bonus, varying according to certain stipulated circumstances, from £6,000 to £20,000, to any company which might have the enter-

prise to undertake a monthly mail-service between England and the colony. This led to a contract with the Peninsular and Oriental Company for £84,000. But the steamers were subsequently withdrawn, their services being required in connection with the Crimean War, and mails were carried between Great Britain and Australia in sailing vessels. A contract subsequently taken, in 1856, with the European and Australian Royal Mail Company, to run by way of the Cape, was a failure, and ended disastrously to the Company. The first mail-steamer to pass through Torres Straits, the *Sun Foo*, arrived in December, 1873. The service *via* Panama, preceded this; it was taken up in 1867, with a subsidy of £55,000 a year, but it broke down. In August, 1870, the Australian Steam Navigation Company undertook the mail-service temporarily between Sydney and San Francisco, and since that time great inter-oceanic mail contracts have been entered into on large annual subsidies—a system which continued unbroken until 1883, when for a time a contract was accepted from the Orient Company, under which a poundage rate was payable on all mail matter carried, with a premium for delivery under contract time, and penalties recoverable by the colony in case of delay. The British Government now shares with the colonies of New South Wales, Victoria, South Australia and Tasmania in the contracts with the “P. and O.” Company and the Orient Company, by the Suez route. Each runs a fortnightly mail, and they carry the bulk of the correspondence. But Queensland subsidizes the British India Company to carry a monthly mail *via* Torres Straits. New Zealand and New South Wales subsidize the San Francisco line, the contract for which is with the Union Steamship Company of New Zealand, but which is worked by the Oceanic Company. New Zealand grants a subsidy to the New Zealand Steamship Company, and also to the Shaw, Savill and Albion Company, both of which run *via* the Cape of Good Hope, calling at Hobart. In addition to these, the French *Messageries Maritimes* run a monthly line, with a branch to New Caledonia, and the North German Lloyd a bi-monthly line, with a branch line to and from Sydney and Samoa, but they are subsidized by their own Governments. The transit of English mails to Sydney now takes from twenty-nine to thirty-eight days. In 1889, there were 1,261 post-offices in New South Wales, and 305 receiving-offices, served by 2,650 persons; the mails were carried over distances amounting, in the aggregate, to 7,299,400 miles, and the total length of the postal lines reached 28,718 miles; the return from the Postal Department of the colony amounted to £395,584, while the expenditure amounted to £393,606. About 53,971,300 letters were carried in the colony in 1889, and about 42,019,100 packets and newspapers, the proportion of letters per head of the population—namely, thirty-eight—being nearly the same as that for England and Wales.

In 1836, shortly after the settlement at Port Phillip was founded, Mr. John Batman was elected by the pioneers as their first Postmaster. In February, 1837, a Mr. John Hawdon contracted to carry the first mails fortnightly between Sydney and Port Phillip. Four years later, the Melbourne Post Office was formally opened, and the first inward mail was despatched to Mount Macedon in February, 1844. The fine edifice that forms the present General Post Office of Victoria was opened in 1867. At the end of 1886 there were 1,429 post-offices in Victoria, dealing with a year's total of 2,330,534 letters and 1,642,289 newspapers and packets. A postage rate of a half-penny is charged on papers transmitted in Victoria. The time allowed by contract for the conveyance of

mails from Adelaide to London is thirty-five days, and one day less for seven trips during the prevalence of the south-west monsoon. The time allowed from London to Adelaide is thirty-five days.

TELEGRAPHS.

THE use of the electric telegraph in New South Wales dates from 1851, and two years later the work of construction was commenced in Victoria. It was not till 1854 that the first wire in Victoria—that between Melbourne and Williamstown—was brought into active use by Lieutenant-Governor Latrobe. A proposal to unite Sydney and Melbourne by telegraph was made as early as 1845, but it was only in 1858 that the plan was carried into execution, Melbourne and Adelaide having been connected in 1856. In South Australia the first line from Adelaide to Port Adelaide, about $9\frac{1}{2}$ miles, was constructed by Mr. McGeorge, but it was soon superseded by a Government line. Tasmania introduced the telegraph in 1857, and two attempts were made to connect Tasmania with Victoria by cable—one in 1859, and the second from Cape Otway to King's Island, and so on to Tasmania, in 1860—each resulted in failure. New Zealand established her first telegraph in 1862; and a line was opened in Queensland from Brisbane to Rockhampton in 1864. In June, 1869, Western Australia opened a line from Perth to Fremantle; and in May, 1869, the first message from Tasmania to Victoria, through the medium of the new electric cable, was successfully received. In each colony inland telegraphs have been constructed, and are worked by the Government, and every important township is included in the system. There is an unbroken line of wire from the Gulf of Carpentaria, round the east and south



A TELEGRAPH MESSENGER, SYDNEY.

coast, to Roebuck's Bay, on the west coast. It is only on the north-west coast, where there are no settlements, that there are no telegraphs.

A great event in the history of Australia was the establishment of the first cable between England and the Colonies. It is almost impossible to realize now that less than twenty years ago there were no cable messages, no European telegrams in the morning papers, of events that had happened the day before, and an entire absence of that intimate acquaintance with the everyday progress of Old World affairs, that is to be

found in Australia to-day. Australia, being at the antipodes of England, a line to connect the two must necessarily be long and costly. The shortest and easiest connection was from Port Darwin to Batavia, and for making that, the colonies were indebted to an English company. Neither singly nor jointly have any of the Colonial Governments ventured on the ownership of cables. They prefer to grant a subsidy, without which the enterprise could not prove remunerative. The first step towards the connection was taken in 1870, when the Overland Telegraph to the Northern Territory of South Australia was commenced, mainly at the instance of Mr. Charles Todd, the energetic Superintendent of Telegraphs in that colony. In the next year, the shore end of the cable between Banjoewangie and Port Darwin was laid at the latter place, and, on the 20th of the same month, a cable message came through from Java reporting that communication was complete. On the 2nd of July, 1872, the first cablegram from England was received in Melbourne, and in October of the same year the Overland Telegraph across South Australia was completed at a cost of £370,000. A submarine cable connecting New Zealand with New South Wales was laid from La Pérouse, Botany, near Sydney, in 1876. A second cable from Rangoon and Singapore, direct to Banjoewangie, by Port Darwin, avoiding the Java land-line, was laid by the Company in consideration of an additional subsidy; and a third from Java to Roebuck's Bay, so as to give an alternative route. Surveys are also being made across the Pacific, with a view to connecting with the west coast of America. A cable message between Melbourne and London travels over 13,685 miles of wire, the course taken, after leaving Port Darwin, being *via* Banjoewangie, Batavia, Singapore, Penang, Madras, Bombay, Aden, Suez, Alexandria, Malta, Gibraltar, Falmouth and London. The total cost of the whole extent of telegraphic communication in the mother-colony of New South Wales on the 31st of December, 1889; viz:—22,606 miles 41 chains—was £713,663 1s. 3d.



POLITICAL AND SOCIAL.

A CENTURY OF PROGRESS.



GEORGE THE THIRD was King when, one hundred years ago, the Empire having just lost her colonial possessions on the North American Continent, the enterprise of Cook and the discipline of Phillip founded on the banks of the Tank Stream, the nucleus of that group of flourishing states that now make up the wealthy and important Australian system. The story of colonization has already been told in the earlier pages of this book. We have seen how the settlement progressed from what it was originally, a mere place of detention for felons under punishment, until it began to take the form and substance of a colony to which the convict element was but an accidental adjunct, to be thrown off as the time went on. It is always to be remembered in speaking of the earlier stages of Australian colonization, that the original purpose of settlement was not to found a colony at all, so much as to provide a place to which the criminal and pauper population of England might be sent, that the overburdened Home country might be relieved. It is true that we find mention in the early state papers of some crude intention of allowing the convict element to reform itself under novel conditions, and solidify in time into a new society. But the experiment, such as it was, was entrusted to the hands best qualified to defeat it; and the early history of colonization in Australia has consequently been blackened by a record of tyranny on the one hand and of criminality on the other, over which it is perhaps best that we should draw a veil of discreet silence. Life in the early settlement presented a good deal of the colour and outward appearance of English life at the beginning of the last quarter of the eighteenth century. Both manners and dress have changed since then, and a good deal of what was once regarded as good public policy and private morality has disappeared as completely from the life of to-day as the knee-breeches and queues of the gentlemen of the period, or the Georgian costumes of the ladies. Meanwhile, however, the interests within the colony were forming themselves. The Macarthurs of the settlement were beginning to gather about them the patriarchal flocks which later on formed the staple of the wealth of the mother-colony; and the officers of the corps sent out to act as gaolers to the first convicts learnt to engage in those questionable trading operations which they carried on with so little scruple and so much success. In the time of Governor Brisbane the colony first attracted the attention of the general public at Home, and the tide of free immigration began to set in, in a small degree at first, but gradually increasing in volume as time went on. Free settlers were then encouraged to come to Australia by the promise of lavish grants of land and the assistance of convict labour. The expense and burden of maintaining these convicts had

become so great that the proportion of the grant of land offered to the new-comer was graduated by the number of convicts he could afford to keep. This system had the effect of introducing a new element into the population, which gradually blended with the original official and emancipated classes. Though the line of demarcation between these was kept as rigidly drawn as possible by the former class, the asperity of the original conditions was in some degree softened, and the average of social and domestic life in a measure raised. These free immigrants brought more or less capital into the colony, too, and were thus enabled to engage in the pastoral and other operations of which they were in the true sense the pioneers. Before this time it is to be observed that the actual work of opening up the colony was commenced by the active and public-spirited Governor Macquarie, who, in the face of the opposition of those who had profited by the state of things he was sent out to alter, had ameliorated the condition of the inhabitants, promoted trade and agriculture, and opened up so much of the colony as was then known by the formation of good roads. Among these was that to Bathurst over the Blue Mountains, which threw open the hitherto virgin country to the west of the Range.

With Governor Bourke another era of social development was entered upon. By this time the free population had acquired so much influence by numbers and wealth that it was found anxiously claiming to be relieved from the burden of a penal establishment, and the rule of prison officials. Bourke showed an intelligent sympathy with this aspiration, and so far as his personal power went, it is to his credit that it was on every occasion used to promote the desire for responsibility of action. To him is due the early emergence of the colony from the twilight of the ante-constitutional days, just as to Macquarie is due its deliverance from the Cimmerian darkness of the earlier penal times. Bourke stopped the system of the assignment of convict labour as it had been carried on up to his time, and handed the privilege over to a Board. He strongly recommended to the Downing Street Authorities at Home the complete abandonment of the transportation system. He introduced the jury-right into the colony, and set on foot a system of assisted free immigration. He abolished the supremacy of the State Church, putting all denominations on a footing of equality. For the first time he gave a public account of the colony's yearly receipts and expenditure. He established the liberty of the Press, and in other ways of which these may stand as examples, he lifted the whole body politic to a higher plane than that on which he found it on his arrival in Australia, and thus more than corrected the tendency of the ill-advised measures of his predecessors.

During the time of Governors Gipps and Fitzroy the agitation for constitutional privileges made considerable way. Step by step the battle of popular rights was fought, and, although contested at every stage by the representatives of the older interests in the colony, by 1850 these long-continued efforts were at last crowned with success. This agitation began in 1825, when Governor Brisbane, on his departure from the colony, took with him a petition for the right of self-government by the colonists. Two years later another meeting for the same object was held. On both these occasions the name of Wentworth was found on the list of promoters of the movement. In 1828, a Royal Charter was received in the colony, under which the first formal Executive and Legisla-



THE LAWN, GOVERNMENT HOUSE, SYDNEY.

tive Councils were constituted. In 1830, another demonstration of those in favour of Responsible Government was held in Sydney; a memorial to the same effect was sent Home on the accession of William IV.; and in 1833, a large public meeting was held which advocated the same object. A body known as the Patriotic Association was formed to direct the popular movement on this question, and at a meeting for the purpose, held in 1841, a strongly-worded manifesto of the people was drawn up, defining the claims of the colonists to control their own political affairs. Another meeting was convened six months later in the same year, and in 1842 an Act was passed by the English Parliament granting a new Constitution to New South Wales, with a Council composed of twelve nominee Members and twenty-four to be elected by the people. This was the first recognition of the elective principle in Australia. The Act reached Sydney in January, 1843, and by June in the same year the first election took place under its provisions. This Constitution remained in force for about thirteen years. It merely satisfied the popular aspiration for the moment, and formed a temporary step between the nominee Council of the previous and the elective Parliament of the succeeding periods. For the next few years, the public mind was occupied chiefly with the anti-transportation movement. The social conditions of the colony had by this time so far developed that the new race which had grown up was no longer content to receive the outcasts of the civilization of the older parts of the Empire. But the settlement of both this and the Constitution question was precipitated in an unexpected way by the brilliant discovery of gold that marked the opening of the second half of the century. How that discovery was made has already been told, and it concerns us here only in regard to the effect it had in changing and re-modelling the social conditions of the Australian people. Immigration up to this time had been fitful at the best. In the time of Bourke and Gipps, encouragement was given to the process by assisting intending colonists to make the passage to Australia. Land was sold, and the prices obtained funded to form an "Immigration Reserve" for this purpose; but the utmost that was done in this way dwindled into insignificance beside the extraordinary effect which the news of the Australian gold discoveries suddenly exercised over the minds of men in all quarters of the globe. The spirit of enterprise and the lust of adventure and gain were every-where aroused. The movement was not confined to men trained to work the earth for a livelihood. The younger sons of wealthy families, young doctors and barristers and University men, who found their diplomas and degrees of little service to assist them in passing the portals of the over-crowded professions to which they had been trained to belong, seemed to have hailed with unanimous enthusiasm the unexpected chance that now offered to try a new field, and make the best of the limited competition of a new country. Adventurers, too, from the Pacific Slope of the United States, who had been disappointed in their hopes of a golden fortune in California, began to pour into the two elder colonies, as well as thousands of other active spirits from all quarters of the world, whose very presence in Australia showed them to be people of restless habit and active mind. Victoria had separated from New South Wales in 1850, so that by the time the gold discovery was made known, the southern portion of Eastern Australia was just entering on its career as an independent colony. The dazzling reports of mineral wealth at Bendigo and Ballarat drew a large proportion

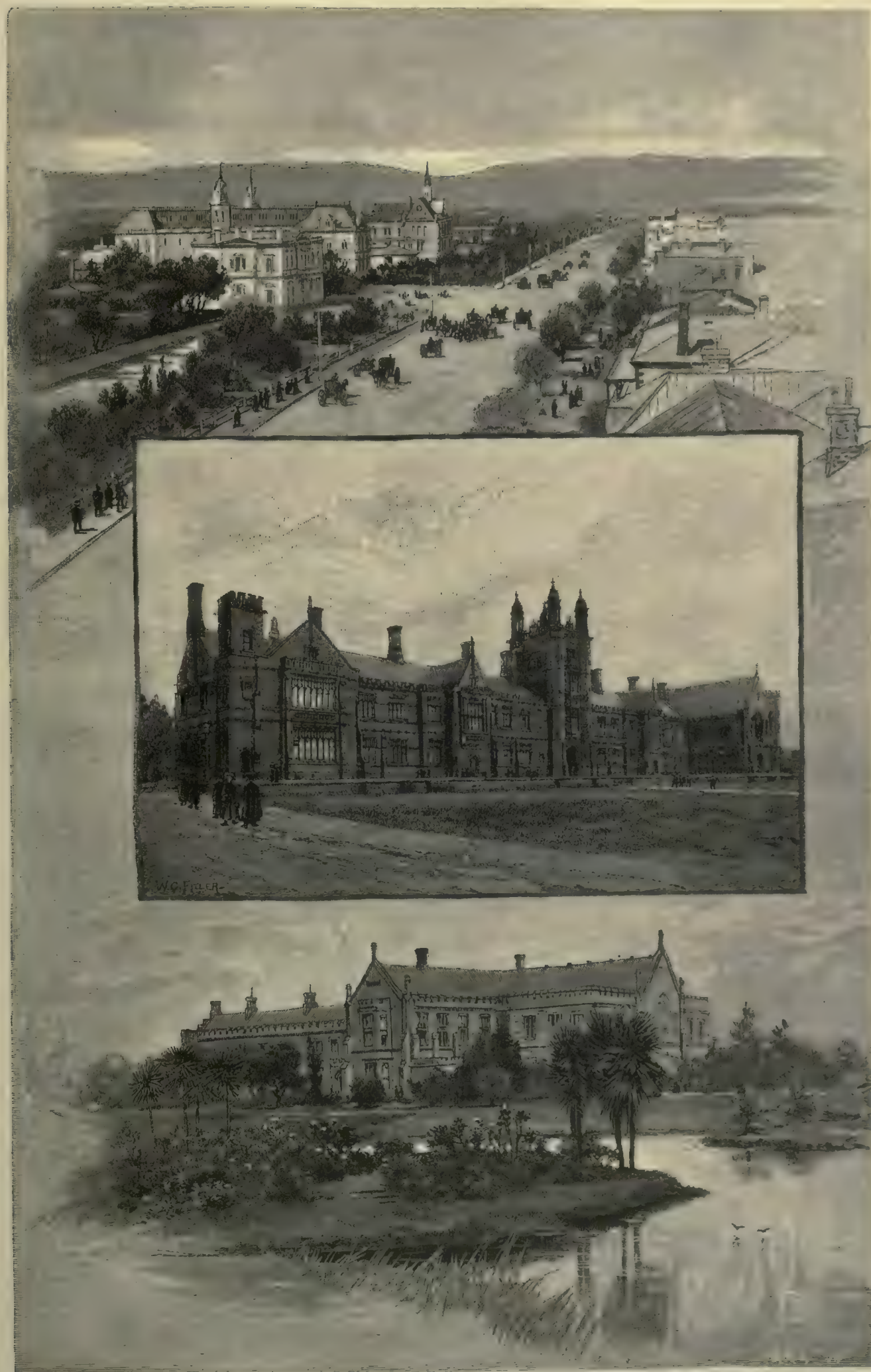
of the new population to these centres, with the result that Victoria advanced towards prosperity by leaps and bounds, and the characteristics of the new element in the Australian population began to make themselves more plainly visible in that colony than in any other of the Australian Group. Tasmania and South Australia—the stories of which have been told in their proper places—were not directly affected by the new element, while Queensland, which became an independent colony only as late as 1859, inherited its results in due course.

The population then in Australia, as well as its leaders, failed to estimate at anything like its real importance the effects of this sudden influx of new blood into the country. The older colonists had grown up from year to year, and from father to son, in the midst of their familiar surroundings, far removed from contact with the stream of Old World life, and to all practical intents and purposes cut off from anything like intimate communication with the rapidly-developing thought and opinion of the mother-country. They belonged, as it were, to a past age, and it was only recently that, with the establishment of a public Press and the spread of popular opinion, they began to feel or to think for themselves. Their leaders had come to Australia at a time before English liberalism as we now know it was invented—before the first Reform Bill of Lord John Russell, or any of that long succession of popular Acts and Measures of the House of Commons that had put the rank and file of the more modern population of England on a much more elevated plane than that occupied by their fathers of even a generation before. The wealthier inhabitants of the colony, and those, consequently, who should have been the natural leaders of the people, had been trained in a state of things of which the spirit was that of the days of a by-gone generation, and long before even the upper classes at Home had been educated by the march of events into their later sympathy with the wants and wishes of the hitherto unrepresented portion of the English people. It can be easily understood, then, that the sudden avalanche of humanity that now descended on the Australian coast really revolutionized public opinion and stimulated the public spirit of the country into more healthful activity. Most of the new-comers were men in the vigour of youth, or in the prime of life, physically able to make their influence and numbers felt in a new country where the stream of life had been accustomed to run so slowly, and mentally active enough to assert that influence as occasion required. Few countries in the world's history, with the single notable exception, perhaps, of California, have passed through the same singular experience as that which now fell to the lot of the Australian colonies. Every one of the immigrant ships that crowded Hobson's Bay and Sydney Harbour in the early fifties brought with it a cargo of muscle and manhood that was soon to be used in carving the destinies of the new country, and nothing at the same time could have better served the interest of Australia, or acted more usefully in the work of its development. It is true that the bulk of the new-comers had but little conception of the nature of the political problem they were to work out in their new home. Those taken from the operative and agricultural classes of the United Kingdom had never in the home they had left polled a vote. Little thought had they for sociological or economic theories, or political privileges, or rights of responsible representation. But they had always the advantage over the population whose character they came to change, that they had been in touch with the

working of free Parliamentary institutions, had seen the development of popular opinion at Home, and had grown up with the growth of modern liberalism in England. Almost every ship that came to Australia in those days carried in it men who were to take part during the next thirty years in the first stages of responsible legislative effort in one or other of the colonies, and the remark has passed into a truism that the seething 'tween-decks of these crowded craft contained more than one raw and inexperienced youth who was to grow up with the country, and who would, later on, be called upon to govern as a responsible Minister of the Crown. Several of the men, who have been Premiers of Colonial Administrations since 1856, came to Australia in this way and at this time, the long list including most of the easily recognizable names of leaders of local political action. Of course their labour, so far, has of necessity been an experimental one. Untrained to the discharge of the duties they were called upon to undertake, they have earned their experience at the cost of the country, teaching themselves and the country by their own mistakes, while unconsciously or consciously working out from day to day the stages of Australian progress, and making way for its future.

Undoubtedly, the greatest political event since the introduction of Responsible Government has been the movement in favour of federation. Tasmania, New Zealand, Victoria and Queensland were separately detached from the mother-colony of New South Wales, and South Australia and Western Australia were founded independently. Each colony was a separate sovereignty, controlled only by the mother-country, the exercise of whose authority was very slight. Hostile tariffs, and even hostile railway systems, developed themselves, and, as a re-action on separation, grew up a feeling in favour of re-union. This first took shape in the passing of the Federal Council Act, but though New South Wales had been represented at the Intercolonial Conference, at which that Act was passed, its Legislative Assembly refused to adopt it, and even South Australia hung back for some time, and entered the Council only tentatively, and for a limited period of three years. The Federal Council met three or four times at Hobart, but its influence was feeble, and its labours were not very important. Still the movement was a beginning in the inevitable direction, and when, in 1890, Sir Henry Parkes proposed another Conference for the purpose of framing a complete Federal Constitution, the Parliaments of all the colonies passed resolutions expressing approval, and each appointed seven Delegates to a Convention. New Zealand, however, which was doubtful of the suitability of federation to its isolated position, appointed only three. The Convention met in Sydney in March, 1891, and, after six weeks' earnest and well-sustained debate, a draft Constitution was adopted to be submitted for approval to the several colonies.

It will thus be seen that the process of the formation of the Australian social and political condition of to-day divides itself into certain clearly defined and easily distinguishable stages. The first stage was that of the naval Governors up to William Bligh, who may be looked upon merely as the gaolers of a penal settlement. With the coming of Macquarie, order and law began to take shape, and these were systematized under the wise rule of Bourke. From that time, to the date of the calling together of the first partly elective Legislative Council, was the next stage, succeeded by the period that closed with the introduction of Responsible Government in 1856, when Australia really entered on the democratic epoch of the present day. Whether or not the Constitution drawn up by the men of



THE UNIVERSITIES OF ADELAIDE, SYDNEY AND MELBOURNE.

a generation ago will be found in the course of years to be exactly fitted to the wants of the Australian people under their altered conditions of education, wealth, and the growing national spirit, is one of those interesting problems that must be left to history to solve. The natural resources and wealth of the colonies have been such that the task of self-government has hitherto been a comparatively easy one. But every year shows indications of its own that interests are growing up and rapidly solidifying themselves that will make the business of politics here as complicated as in most of the older countries of the world. In the earlier years of Responsible Government, these interests were in their rudimentary stages, the mechanism of politics was in its simplest form, and the factors stood at their lowest concrete expression. The political conditions of Australian public life thus presented material for a curious study—such as that of which De Tocqueville was enabled to follow out the fascinating processes in the United States, nearly fifty years ago, and of which the Australian colonies furnish just now the most interesting and instructive example.

EDUCATION.

WHEN the Church and School Corporation, under the authority of the Colonial Office, was constituted in 1825, the provisions of the charter were all in favour of one system of education, as they were all on the side of one Church. Yet a good work was commenced, inasmuch as the educational interest in the colony began, at least, to take definite shape. Up to that time the task of the instruction of the youth of the settlement had been undertaken in a hap-hazard way. Here and there a minister of religion, or occasionally some educated convict, might be found instructing children in the crudest rudiments of what is now known as a common-school education; still the work of education as an affair of State concern cannot be said to have properly begun till 1825. Dr. Lang established his Scotch College soon after, without State aid, and schools in connection with the Roman Catholic body existed from a comparatively early period, but the administration of the charter, solely in the interests of the Church of England, had the effect of discouraging all the other denominations. The seventh part of all public lands made a princely endowment to the Church of England for church and school purposes, and the other religious bodies felt very keenly their exclusion from participation in this appropriation. A grant of this kind had been made in a similar way for church and school purposes in Canada, and when a precisely similar difficulty arose there, and the question was submitted to the Courts for their ruling, it was held that all religions tolerated by the State within the Dominion of Canada were equally entitled to participate *pro rata* in the grant set aside for purposes of religion and education. Up to Governor Darling's time the official tendency was distinctly against the recognition of any such general claim in Australia, and it was not until the arrival of Governor Bourke that this matter was placed on its proper footing, both as regards education and religion. In a remarkable despatch, to which we shall presently have occasion to refer, Bourke dealt with both these questions together, for at that time they each formed part of what was really one and the same question. He aimed, however, at dissociating the two interests, and at making the educational system of the colony a State affair, without the control of any one of the Churches. He therefore recommended to Lord Stanley

the introduction of the Irish National School System. On the receipt of the official reply to this report, and its suggestions from Lord Glenelg, who had in the meantime replaced Lord Stanley, it was found that, although expressing a preference for a system which allowed of the reading of the authorized Scriptures in the schools, that official gave his consent to the introduction of the National System where practicable. When Bourke made the contents of this Home despatch known, it was vehemently opposed on the ground that the system proposed was infidel and un-Christian, and in order to pacify the opposition, and reduce the proposal to a practical shape, the system of Denominational Education was introduced. By this system the recognized religious denominations in the colony were aided from the Public Funds. Each body had its own schools, in which the work of religious education went forward side by side with that of secular instruction. In 1844, a Select Committee appointed by the Legislative Council reported in favour of the National System, and against Denominationalism. On the question being submitted to the House, it was carried in favour of the former; but the proceedings were vetoed by the Governor, Sir George Gipps, who directed that the Denominational System should be continued, and this was accordingly done. The advocates of the National System succeeded, however, in having a sum of £2,000 appropriated for the purpose of experiment. The two systems con-

tinued to work in competition with each other for nearly twenty years, or ten years after the granting of Responsible Government, when the Public Schools Act was passed in 1866. This Measure acknowledged the existence of two classes of schools—one purely secular, and the other denominational, both supported by the State and controlled by the Council of



A HALF-TIME SCHOOL-TEACHER, AND A STATE SCHOOL IN THE BUSH.

Education. Fourteen years later, another Measure was passed in the Parliament of New South Wales, under the operation of which the denominational system of education was entirely abolished so far as the control or assistance of the Government was concerned, and a system established which made the State education of the youth of the colony entirely secular—except so far as the reading of the Scripture extracts in the Irish National School books was concerned—and compulsory up to a certain age. The ministers of the different denominations, by the provisions of the Act, are, however, allowed access to the schools during a certain allotted period of each day, for the

purpose of affording instruction in religion and morality. Under this Act of 1880, the old system of denominational education came to an end. At the same time the care of the administration of the Act and of the school system of the colony was taken out of the hands of the Council of Education and placed in those of a responsible Cabinet Minister, the new portfolio of Public Instruction being created for the purpose.

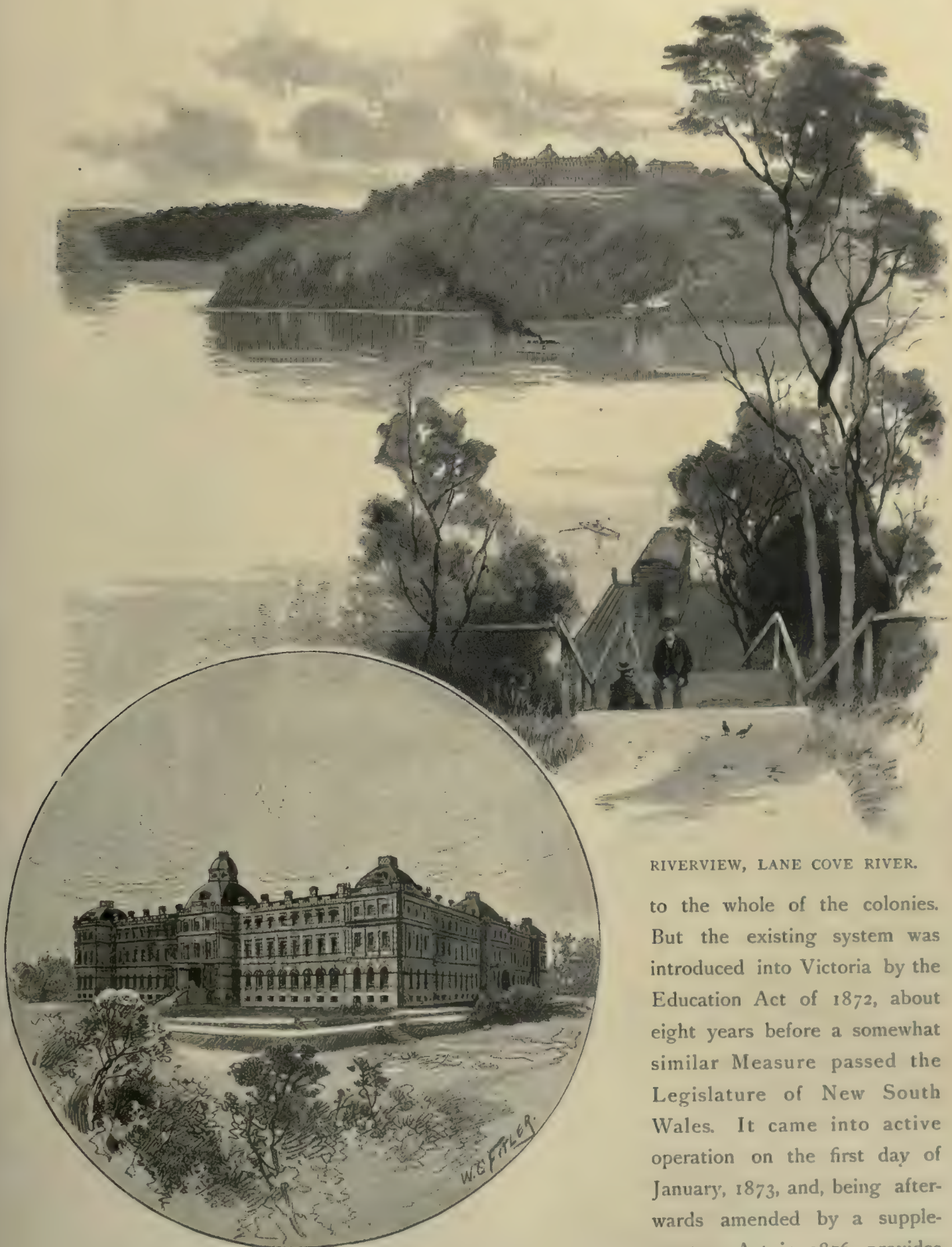


AN AUSTRALIAN STATE SCHOOL IN THE CITY.

The passing of the Public Instruction Act, which came into force in New South Wales in 1882, marked a new era in the State system of education. The Measure was not carried without a strong fight on the part of the advocates of "religious education," the opposition being, however, confined almost exclusively to the Roman Catholic and the Anglican bodies. The Roman Catholic prelates, supported by the clergy and laity, expressed their determination to carry on their own schools, whatever the cost or sacrifice might be, with the result that the seventy-five Roman Catholic schools which were in existence in the colony under the State aid system in 1882, were, by the beginning of 1891, increased to three hundred and thirty-four, this number including two hundred and thirty primary schools and eight colleges. The total number of children attending these religious schools—almost without exception conducted by religious teaching Orders of Nuns and Brothers—at the close of 1890 was thirty thousand six hundred and ninety-nine. In the neighbouring colony of Victoria, the returns from the Roman Catholic self-supporting schools showed a total of twenty-seven thousand three hundred and sixty-seven pupils, while the estimated total for the whole of Australasia was eighty-six thousand. The denominational schools in New South Wales, other than Roman Catholic, had, in 1891, dwindled down to less than seventy—mostly Anglican—an evidence that, with one exception, the Churches have given up the fight against the popular system. The Roman Catholics—upon whom, in all the colonies, falls the heavy cost of carrying on their "religious" schools—have, on the plea of relieving the Government of a large annual expenditure, strenuously sought, but unsuccessfully, for State recognition in the form of payment by results. The primary public schools in the

colonies, exclusive of denominational and private establishments, numbered, in 1891, nearly six thousand, and these State schools were attended by more than a million children.

What has been said of New South Wales applies, of course, in the earlier stages,



ST. IGNATIUS COLLEGE, RIVERVIEW, SYDNEY.

RIVERVIEW, LANE COVE RIVER.

to the whole of the colonies. But the existing system was introduced into Victoria by the Education Act of 1872, about eight years before a somewhat similar Measure passed the Legislature of New South Wales. It came into active operation on the first day of January, 1873, and, being afterwards amended by a supplementary Act in 1876, provides

free primary instruction of a secular character to all children taught in the State schools, and prescribes a certain standard of attainment for all children whether so schooled by the State or not. - In Queensland, the Act of 1875 regulates the educational interest. Among the first Enactments of the Legislature after the separation from New South Wales, were an Act to provide for primary education and an Act to provide for the establishment of grammar schools, both of which received the Royal Assent in 1860. Under the former a Board of General Education, under the Chairmanship of a Minister of the Crown, was called into existence to superintend the primary school system of the colony. The Act did away with future State aid to denominational education, but this provision was so earnestly argued that the regulation was soon after relaxed so as not to exclude denominational schools established subsequent to the passing of the Act. At the beginning of January, 1870, public education was made free of charge in all the primary schools of the State. In 1874, a Royal Commission was appointed to inquire into the working of the educational system, and in the following year the present Act was passed by Sir Samuel Griffith, constituting education secular, compulsory and free. In South Australia, the system first adopted was that of payment by results. The Churches had begun to establish schools before the State thought of interfering, and when it entered the field, it did so simply to supply what was deficient in the labours of the Churches; in other words, it offered payment for results. Schools containing a certain number of children, and where the teaching was reported to be up to a certain grade, were proportionately subsidized. After six years of experiment, however, it was found that under this system the colony was drifting behind its neighbours, and that if the State was to do anything effective in the way of education it must do something more than merely inspect and subsidize; and accordingly a system in which the State acted more directly in the maintenance of schools was substituted. In Western Australia, the elementary Education Act now in force was passed in 1871. It is administered by a Central Board, aided by District Boards elected by the franchise-exercising population. The Act acknowledges Government schools, which are undenominational, and assisted schools, which may be conducted by any religious body. - In the State schools the education is secular, but not free. In Tasmania, the Education Act of 1886 regulates the system of State instruction. It is administered by the Minister of Education, and the instruction given is purely secular. Attendance is compulsory on three days out of the week, and fixed fees are charged. In New Zealand, definite recognition of the duty of the State with regard to the instruction of the people dates from the establishment of the Provinces in 1853. From that time until the abolition of the provincial form of Government at the end of 1876, it was left to each Province to fix its own system of public instruction. One of the first Acts of the General Assembly after that date was to make temporary provision for carrying on this work until a Measure adapted to the general wants of the people could be passed. This was done in 1877, when a Bill was put through which provided for a Department of Education under a responsible Minister.

It will thus be seen that one of the principal objects to which the Australian colonies devoted their attention since the introduction of Responsible Government has been the public instruction of the children of the people. For some years the interest in public education remained at a low ebb. Even in the centres of population, while

the wealthier classes were always fairly well provided for in this respect, the children of the working classes were in a large measure neglected. But in the sparsely-peopled districts in the interior, where the indications of settlement were few and far between, and children, perforce, grew up as wild almost as the kangaroos that settlement had displaced, the prospect was for many years a dismal one indeed. Such teaching as went



THE LEADING GRAMMAR SCHOOLS OF MELBOURNE.

on was unskilful and ineffectual, being without supervision, and, of course, without method. The school-master was ordinarily a man who had failed at everything else, and the person who had proved his inability to take care of sheep or

of himself, was often tacitly taken to have proved his capacity to undertake the charge of children. With the spread of the successive systems of State education, all this passed away. School buildings, of a more or less pretentious but always serviceable order, were opened in every village centre. Where the population was sparse, provisional schools were opened—and to-day every child in the land has the advantage of a sound primary education, literally forced upon him or her by the State.

While the principal educational work has consisted in covering the country with primary schools, so that no future citizen should be destitute of elementary knowledge, the higher education has not been neglected. To provide for the requirements of primary education, and thus whet the appetites of the growing population for a wider range of knowledge without providing adequate means for its gratification, would have

been, in some measure, to stultify the work of the State in this connection. This was recognized at a very early period, and, though a few colleges and higher schools already existed, efficiently conducted by the religious denominations and by private teachers, it was felt that the imperative duty of the State called for an extension of the State system in this direction as well. Hence grammar schools were established in every colony, but they are not all constituted on the same plan. Some of the earlier in



THE MODEL SCHOOL, MELBOURNE.

Sydney were purely private institutions, though one of them—the King's College, at Parramatta—was a Church of England institution, with an endowment of land. Its establishment was followed, not many years after, by the Sydney Grammar School, the management of which was placed in the hands of trustees. This has been from the first a purely unsectarian institution, and receives a moderate annual endowment. Lyndhurst College, a Roman Catholic institution, came after. Of late years, the different Churches roused themselves, and established numerous colleges and grammar schools, thus increasing the competition, and also the facilities for educa-

tion. In all the large cities of the colonies there are to be found fine buildings connected with the various Churches—notably, the Roman Catholic—in which the work of higher education is effectively carried on. Some of the most costly and conspicuous edifices in the different Australian capitals and provincial towns, not devoted to public purposes, are thus used, and the leading colleges of the more important religious denominations are really splendid monuments to the zeal of these bodies in the cause of education. In point of architectural beauty and picturesque situation, the Jesuit College of St. Ignatius, on the Lane Cove River, Sydney, is one of the best examples. In Victoria, there is no national grammar school; the great Churches have each established one of their own, and have received grants of land for the purpose. In South Australia, too, the principal grammar schools are ecclesiastical. In Queensland and New Zealand, the people have given their preference to State grammar schools, and in both these colonies provision has been made at the public expense for the higher education of girls as well as of boys. In some of the colonies, provision is made for franking clever children from the primary schools through the higher institutions, and in New South Wales high schools are established at which the education is only half as costly as at the grammar school. It will thus be seen, that there is no absolute uniformity in the grammar-school systems of the different colonies, but in every one of them a first-class education is obtainable at a moderate rate. No young person of good capacity, and with a passion for learning, can want for opportunity. The means are within the reach of all who care to appropriate them. The rising talent of the colony has abundant opportunity for training itself. All the colonies have been liberal, almost lavish, in their educational expenditure, but there is a strong, almost intense, feeling that the chances should be free to the poor as well as to the rich, and that the humblest child who is willing to

climb should get his foot upon the ladder. In all the colonies, except Queensland and Western Australia, there are local universities. All the universities are well equipped with educational apparatus, and each has a full staff of competent professors. At Melbourne and at Sydney there are medical schools, in which the number of students is annually increasing. The latest development in the direction of the higher education of women is the establishment of a woman's college in connection with the Sydney University. The Sydney University, which was incorporated in 1851, has a roll of nearly eight hundred students, and receives noble support every year from the Government, and the list of private benefactors includes the late John Henry Challis, whose bequest amounted to £200,000. There are three affiliated colleges—St. Paul's (Anglican), St. John's (Roman Catholic), and St. Andrew's (Presbyterian).

The affiliated colleges correspond in some measure to the colleges within the Universities of Oxford and Cambridge. In the colonies they belong to the various denominations, and are aided by the State. Some of these collegiate buildings have been erected out of funds provided partly by the State and partly by subscriptions, and in one notable instance—that of the Ormond College, in Melbourne—the expense has been borne by the munificent liberality of one man. The interests of general education and culture in the colonies receive attention at the hands of the State in various ways other than through the instruction

given in primary and higher schools. Schools of Arts—or Mechanics' Institutes, as they are sometimes called—have been widely established throughout all the colonies, so that nearly every Australian township throughout the Continent can now boast of its local institution of this kind, where lectures are given, and educational influences of a popular kind regularly brought to bear. Each such institute has its public library, aided in New South Wales by a judicious system of book-

lending on the part of the State. Free public libraries are found in the chief metropolitan cities, those of Sydney and Melbourne being admirable institutions of their kind, and noble testimonials to the intellectual curiosity and literature-loving tastes of the people as a whole. In Sydney, besides the Public Library proper, there is an efficient lending-branch, from which the public are allowed to borrow books without charge, subject only to the rules of the institution. It is from this lending library that the provincial Schools of Arts are from time to time provided with parcels of books, in addition to their own stock. These parcels are renewed when done with, and so a continual interchange of literature is kept up even with the outlying districts of the colony. Not the least of the active educational agencies of the Australian Colonies are the technical schools that flourish and carry out an excellent work in many of the larger



THE SCOTCH COLLEGE, MELBOURNE.

cities. These valuable institutions apply themselves to the duty of providing instruction to all who may care to avail themselves of their benefits, in the practical occupations, trades and professions of life. The number of persons who are found to co-operate with the advantages thus offered is a large and ever-increasing one, and the results as shown in the yearly exhibitions of these Technical Schools are in the highest degree encouraging.

RELIGION.

THE circumstances attendant on the first steps at Australian colonization were not exactly such as to favour any very marked religious developments, and the settlement for some time might have been searched in vain for any very encouraging evidences of this kind. The first minister of religion, it is true, came out as chaplain of the First Fleet, but the conditions of primitive settlement were apparently adverse to the efficacy of his ministrations, for in the early records frequent mention is made of the antagonism of the Rev. Richard Johnson to the official element, and the difficulty he experienced in his endeavours to enlist its interest in the work on which he was engaged. His chief trouble was the building of a church, in which task he vainly sought the Governor's assistance. The usual reply to his solicitations was to the effect that the housing of the population and stores claimed first attention. He therefore undertook, after a time, to build a church himself, and in 1793 he opened a small building for Divine Service on the east side of Sydney Cove. This primitive structure was built of wattle and plaster, and covered with thatch. It was seventy-three feet long by fifteen feet wide, and had a transept measuring forty feet by fifteen feet. Little sympathy subsisted between the chaplain and the officials, it would seem, for the former is reported as preaching a sermon—after the arrival of Governor Hunter to relieve the temporary military Administrators of the Government—in which he denounced in no measured terms the extortion and debauchery of the officers, whom he accused of driving the settlement to ruin by charging twelve hundred per cent. for the goods they retailed. The chaplain left the colony in 1802, having amassed a considerable fortune by agriculture. The same year that saw the erection of Mr. Johnson's church witnessed the laying of the foundation stone of the first St. Philip's Church, Sydney; and in the following year the Rev. Samuel Marsden came to the colony, where he continued to be connected with the development of the denomination to which he belonged for upwards of sixty years. The Church of England remained the only recognized State Church of New South Wales up to the time of Governor Bourke—that is to say, 1833. The ministers were, like Samuel Marsden, usually civil magistrates as well, and some strange stories are told of the effect of this novel combination of offices in a penal settlement. Some order was introduced into the religious system of the infant settlement in 1825, when the Church and School Corporation was established by Royal Charter, under which one-seventh of the whole of the lands of the colony were set aside in perpetuity for the purposes of religion and education in connection with the Church of England. In the same year the Rev. Thomas Hobbes Scott was appointed the first Archdeacon of Australia, and from this time the religious interest in the colony may be said to have been definitely established. The corporation lasted only until 1833, when

it was dissolved by Order in Council, the trust reverting to Government, and a system was introduced under which every religious denomination represented in the colony was to receive support in proportion to its numerical strength. Bitter complaints had been made from time to time by the adherents of other religions, of the injustice of recognizing only one church in the colony, and of subsidizing that one by a heavy tax on the whole of the community—for the expenses of church administration were chargeable from year to year against the Treasury, until the land-grants became reproductive—while the others were left at the mercy of the official whim of the hour. The liberal and politic spirit of Bourke was not slow to perceive the anomalous nature of the existing arrangement. He drew up a

despatch for the information of the Secretary of State for the Colonies, Lord Stanley, in which he set forth the facts of the whole question as it offered itself to his own judgment. After dwelling on the expediency and necessity for the promotion of religion and good Government, that the State should extend



ST. PHILIP'S ORIGINAL CHURCH, SYDNEY.

its countenance and support to the dispensation of the ordinances of religion, he went on to lay down the following principles:—That the State aid should be administered so as not to render ministers of religion independent of their people; that the exclusive endowment of any one body of professing Christians was impracticable; that instead of extending State aid to one Church, and casual assistance to two or three others, it was expedient to extend the countenance of the Government to all the Churches indiscriminately. He then proceeded to offer a detailed suggestion as to the way State aid should be administered in future. At that date the Church of England received £11,542 per annum, the Catholic body £1,500, and the Presbyterian communion £600. Bourke now proposed to give a contribution to every church building in the colony, proportionate to the amount publicly subscribed, and to appropriate salaries to ministers of religion proportionate to the size of their congregations. Two years were allowed to pass before any reply was forthcoming to this State Paper of Governor Bourke, and in the meantime Lord Stanley had been succeeded at the Colonial Office by Lord Glenelg. One of the first acts of that official's authority was to accept these recommendations of Sir Richard Bourke, and the State Church of Australia soon became, practically, a thing of the past. The public appreciation of Bourke's Administration took the form of a statue, which now stands as an historic land-mark in the Sydney Domain.

The account thus given of what was done in the early days represents what, in the judgment of the mother-country, was the religious policy best suited to these young

colonies. But when they were endowed with self-government, that question was handed over to them, with others, and left to their own determination. The first colony to move in the matter was South Australia, which, at the very first election under the Constitution Act, returned a majority of members pledged to abolish State aid to religion. Amongst the early immigrants to that colony there was a strong infusion of the Noncon-

formist element, and that gave a tone to public opinion on the question. The decision arrived at, therefore, was never reversed, and the other colonies, though somewhat slowly, followed suit. Saving the personal rights of old recipients of State aid, all the Churches in Australia are now, and have been for many years, dependent on voluntary contributions.

The period from the foundation of the colony up to 1835 had not elapsed, however, without certain unmis-



DR. LANG'S CHURCH, JAMIESON STREET, SYDNEY.

takable developments of the religious systems of the colony outside the Church of England. During these forty-eight years the Roman Catholic and Presbyterian Churches had established themselves and built up valuable interests. The latter, under the vigorous direction of Dr. Lang, had rapidly grown into wealth and influence, as the kirk on the hill to the left of Sydney Cove soon rose to witness. This old-fashioned edifice still stands, a relic of the early colonial days. Dr. Lang's immigration labours had also a very important influence in giving strength to his Church. He saw what a fine opening the colony afforded for frugal and industrious Scotchmen, and wishing also to balance the somewhat disproportionate immigration from Ireland, proceeded to exert himself with great energy and success to promote immigration from Scotland. The history of the Roman Catholic Church in Australia may be said to have commenced with the arrival of three priests in 1799, Father James Dixon, Father William Harrold and Father Peter O'Neill. The three priests named, did not come, however, as missionaries, but as prisoners. They were transported under the penal laws, with an Irish Protestant clergyman, the Rev. Mr. Fulton, during the Irish Rebellion of 1798. Father O'Neill was released on a free pardon within six months of his arrival, and returned to Ireland, but his less fortunate companions, who were also pardoned after the lapse of some five years, ministered as best they could, during that period to the prisoners of their faith, the majority of whom had been, like the priests themselves, transported for participating in the Irish Rebellion. From 1809 till 1817, there was no Roman Catholic priest in Australia, and Arch-priest Jeremiah O'Flinn, who arrived in November, 1817, to undertake the duties of chaplain, was, after a few months,

sent back by the Government on the ground that he had not been "authorized" to come to the penal settlement. In May, 1820, two legally appointed Roman Catholic chaplains, Arch-priest John Joseph Therry and Father Philip Connolly, arrived. Arch-deacon McEncroe and Dr. Ullathorne followed in 1832, and Archbishop Polding in 1835. The first Roman Catholic church in Australia was commenced in Sydney, on the site now occupied by St. Mary's Cathedral, on the 29th of October, 1821. At the present day, the Roman



CITY AND SUBURBAN CHURCHES, SYDNEY.

Catholic body can boast of 1200 churches, including 15 cathedrals, throughout Australasia.

The two prominent denominations may be said to have grown up together. The original St. Philip's Church was destroyed by fire in 1798, and the second building was opened in 1809. Other Anglican churches sprang up at Windsor, Parramatta, Newcastle, and elsewhere, and in 1822, St. James's, Sydney, for many years the principal sacred edifice belonging to the Church of England, was opened for public worship. In 1820, the first steps were taken for the erection of St. Mary's Roman Catholic Cathedral, Sydney. A meeting was called in the Court House, and all classes in the community united in subscribing towards the cost of the proposed building, while the Governor promised a subsidy from the Treasury. The foundation stone was laid the next year by Governor Macquarie, and the Cathedral was blessed and opened by Archbishop Polding in 1836. This edifice, upon which £60,000 had been spent, was destroyed by fire in 1865, and the new building has, up to the present time, cost £150,000. Dr. Broughton, who had

succeeded Archdeacon Scott, was consecrated first Anglican Bishop of Australia in 1836, the ministry-roll, meanwhile, having been added to by the arrival of Archdeacon Cowper. The foundation stone of St. Andrew's English Cathedral, Sydney, was laid by Governor Bourke in 1837. Bishop Selwyn, of New Zealand, arrived in the same year; Dr. Nixon, of Tasmania, was consecrated in 1842; the first Bishop of Brisbane in the following year; Dr. Perry, first Bishop of Melbourne, in 1847; and Dr. Short, the first Bishop of Adelaide, reached his diocese in the same year. The erection of the Roman Catholic Cathedral in Melbourne was commenced in 1857; Dr. Goold, who arrived in 1838, having been consecrated first Bishop in 1848. The first Roman Catholic Bishop of Adelaide took charge of his diocese in 1844; the diocese of Hobart Town was formed in 1842; that of Perth in 1845; and Brisbane in 1859. In the See of Sydney, Bishop Broughton was succeeded by Dr. Barker, Dr. Barry and Dr. Smith; and John Bede Polding, the Roman Catholic Archbishop, by Roger Bede Vaughan and Cardinal Moran, the latter being created first Cardinal of Australia in 1885, a year after his appointment to Sydney as Archbishop. In Melbourne, Dr. Moorhouse succeeded Dr. Perry, and was in turn followed by Dr. Goe. Dr. Carr is Archbishop Goold's successor. The Presbyterian Church in Australia practically dates from the coming of Dr. Lang, in 1823, although service had been held as early as 1809, on the Hawkesbury, where a small church had been erected. In 1824, a Presbyterian Church was opened in Hobart Town, and the first clergyman of that body, the Rev. James Forbes, arrived in Victoria in 1838. Progress in the other colonies rapidly followed the advance of settlement, until Presbyterianism became the power in the religious world of Australia that we find it to-day. The Wesleyan communion was represented in Australia as early as 1815, by the Rev. Samuel Leigh, although the first recorded class-meeting dates from 1812. The first service was held in Hobart Town in 1820, by the Rev. B. Carvossa, and at Port Phillip by the Rev. Mr. Orton, in 1836. Since these dates the Wesleyan organization also has spread itself over the face of the Australian Continent, in the religious system of which, as well as the Islands of Polynesia, it plays an influential and highly important part.

In the missionary work among the natives of the Islands of the Southern Seas, it may be stated that a keen rivalry has for many years existed between the Wesleyans and the Roman Catholics. The work of the Roman Catholic Church in this direction has been carried on during the past fifty years chiefly by the French Order of the Society of Mary. The missionary field of the Marist Fathers embraces Central Oceanica, Navigator's Islands and Fiji, with three Vicars Apostolic, having episcopal powers in charge. According to the returns for 1891 from these missionary centres, the number of priests was sixty; the number of nuns in charge of the native schools, fifty; and the total Roman Catholic population nearly thirty thousand. In New Guinea and New Britain the work of the missionaries of the Sacred Heart—another French Order—is under the direction of Archbishop Navarre and two Vicars Apostolic.

It is impossible to form any just estimate of the social progress of the Colonies unless the influence of the different denominations is taken into account. Originating, in the first instance, with the most humble beginnings, and fostered by the loyal zeal of earnest and self-sacrificing men, the religious bodies expanded and grew in

numbers, and in their influence for good, with the growth of the population, until to-day we every-where see in Australian cities tall spires lifting their towers against the sky, and imposing buildings adding to the beauty of our streets, and proclaiming in the most



THE INTERIOR OF THE ANGLICAN CATHEDRAL OF ST. ANDREW'S, SYDNEY.

substantial way the reality of the faith of those who erected these splendid monuments. The earlier descriptive pages of this book give in detail the results of all this zeal and enterprise, since in every centre of population we find the religious element variously

represented, and the evidences of actively energetic influence on Australian life everywhere apparent. The Anglican and Roman Catholic Cathedrals in Sydney and Melbourne are worthy imitations of noble examples of ecclesiastical architecture elsewhere, and many of the sacred edifices in the larger country towns are not far behind these in importance. If we contrast the state of religion to-day with that of fifty years ago, the progress and vitality of the Churches must be at once acknowledged.

It is important to point out that all the Churches are not only centres of religious instruction, but of general education and charitable activity. The Sunday-school system of England has been thoroughly naturalized, and fully two hundred thousand children are taught in this way, the services of more than ten thousand teachers being enlisted in the work. Many of the Churches, especially in the towns, have established literary and de-

bating societies attached to them, besides Bible classes for special instruction in Scripture. Attached to all the Churches, too, is a great variety of societies for relieving distress, and each Church prides itself on not neglecting its own poor. Most of them have agencies for supporting their own branches in the more thinly populated parts of the colony, as well as missionary societies for sustaining religious work abroad. Taken as a whole, the Churches are important agencies in the intellectual, social and practical life of the community, and though unaided by the State, of which the policy, as we have seen, is one of consistent non-interference, they relieve it of much that would otherwise devolve upon it.



THE ROMAN CATHOLIC CATHEDRAL OF ST. MARY'S, SYDNEY.

The general affairs of the Church of England in the Australian Colonies are regulated by a General Synod of the Dioceses in Australia and Tasmania, meeting every four years under the presidency of the Lord Bishop of Sydney, as Primate of Australia. This institution was called into being at a general conference held in Sydney in 1872. Provincial and diocesan synods deal with the ecclesiastical affairs of the different colonies and dioceses in regard to their own immediate affairs. The Roman

Catholic Church in Australia has at its head His Eminence the Cardinal, Archbishop of Sydney, who is empowered as Delegate Apostolic to call a plenary council of Bishops of the various dioceses together, as occasion requires, for purposes of consultation. Diocesan affairs are managed by clerical conferences and synods. The Presbyterian Churches of the colonies are all ecclesiastically independent of each other, though their tests are the same and their polity identical. A Federated Union of the churches of the various colonies held its first meeting in Sydney in 1886. Each Church is presided over by its own elected Moderator. The Wesleyan Church of Australia has enjoyed practically independent government since 1855, up to which date it had been a mission of the British Conference. From that time until 1873, the Church held the *status* of an Australian Conference, but in the year named the British Conference acknowledged its independence by a resolution of that body. A Triennial Conference of all the churches governs the Wesleyan body in Australia, which is subdivided into four conferences, each under its own elected president. The Congregational Unions of the various colonies govern



A CHINESE "JOSS" HOUSE IN AUSTRALIA.

the local affairs of the denomination under the direction of an elected chairman and a committee. The different colonial branches of most of the other religious bodies are similarly independent of each other, each pursuing its own work in the light of the special circumstances in which it finds itself placed. The Jewish Church is represented by its rabbis in the respective colonies.

It is impossible to do justice to the religious interest in Australasia without advert-
ing to the great gain which has accrued to the social and intellectual life of the colonies from the presence and influence of those leaders of the more important denominations who have, from time to time, taken up their residence amongst us. The prominent churchmen, whose eloquence, scholarship and administrative ability have been placed at the service of the colonies by a succession of fortunate events, are so well-known that it is unnecessary here to go over the bead-roll of honoured names. Our debt as a people is great, not only to the individuals, but to the organizations which sent them to labour amongst us. It may be, that in the course of time, we shall desire to see the higher offices in the different churches, like the higher political and professional posts of service, filled by Australians rather than by candidates brought

specially from Home for the purpose. Such a state of things will, doubtless, come in due course, as one of the stages of Australian development. But the colonies must continue to rest under a debt of gratitude for the intellectual aids of growth supplied by the presence amongst us of scholarly and disinterested men in the early period of our intellectual awakening.

THE LEGAL INTEREST

THE legal interest in Australia has been an affair of very gradual growth. When Phillip landed his party of soldiers and convicts in 1788, one of the first acts was to proclaim martial law in the Settlement, and though shortly after that a kind of regular tribunal was established, it remained for some years a military court rather than anything else. Wild stories have been told of the rough-and-ready proceedings of the irresponsible rulers of these strange early days, but in 1800 the first regular Judge Advocate was appointed in the person of Richard Atkins, in succession to Captain Collins, the first

nominal holder of that office. After the rule of the New South Wales Corps came to an end by the action of its officers in the Bligh affair, Governor Macquarie brought out to Australia with him a new Judge Advocate, Elias Bent, who arrived in 1809. This official was recalled in 1814, and his successor Geoffrey Hart Bent, introduced a new Charter of Justice, which, though crude enough in itself, was at least a sign that the affairs of the Settlement were emerging from chaos into some distant resemblance to order. The charter established three Courts. The Governor's Court dealt with civil matters involving sums of money up to £50, the Judge Advocate and two magistrates adjudicating. The Supreme Court consisted of a judge appointed



SIR JAMES MARTIN.

under the Sign Manual and two locally appointed magistrates; while the Lieutenant-Governor's Court sat in Tasmania, under the presidency of the local Judge Advocate, with two of the inhabitants nominated by the Governor. Judge Barron Field came in 1817, and, on his departure from the colony, was succeeded, in 1824, by the first Australian Chief Justice, Sir Francis Forbes. This notable colonist brought with him the first real Charter of Justice the colony possessed, and its liberal and expansive provisions were due to his own broad sense of public justice in drawing it up—a task that was committed to his hands by authority before leaving England. The eminent



MELBOURNE CUP.—RACE-COURSE FROM MEMBERS' STAND.

services of this remarkable man have not yet received their full measure of acknowledgment, but it is to him that the people of to-day have to look back for the beginnings of the social and political privileges they now enjoy. The freedom of the Press and trial by



MOUNTED POLICE AND A BLACK TRACKER.

jury are both directly traceable to his action. On the arrival of Sir Francis Forbes, his Charter of Justice was formally proclaimed in Sydney on the 17th of May, 1824; and about the same time arrived in the colony a great many of those whose names have since become part of the legal history of the mother-colony. In that year, too, the first attempt to

separate the professions was made, on the motion of Messrs. Wentworth and Wardell. This was not effected, however, until 1829, when the barristers and attorneys then practicing were allowed to make choice of the branch they preferred to follow. The first Supreme Court Jury dates from 1825. In 1827, arrived Mr. Justice Dowling, afterwards second Chief Justice of New South Wales, and the next year the Supreme Court buildings in King Street, Sydney, which had been commenced in 1820, were opened. In the same year, "Emancipists," who had hitherto been excluded from the exercise of the jury-right, were for the first time here admitted to that privilege, on the ruling of the Chief Justice, although their absolute right thereto was not formally acknowledged by the Full Court until 1833. In 1837, Judge Forbes retired, having done a work in the colony second to that of no other servant of the State and of the people. In all matters pertaining to jurisprudence the colonists, as in politics, worked their way steadily, though not without difficulty, from the earlier colonial *régime* to the condition enjoyed by their brethren in England. They always had before them the English Constitution as a model to work to, and they never rested until society in the colony was established on an English basis.

The first Court was opened at Port Phillip in 1841. The first Supreme Court Judge in South Australia was appointed in 1839, and the first Supreme Court of New Zealand opened in 1842; and in 1844, Mr. Alfred Stephen was appointed to succeed Chief Justice Dowling in New South Wales. Sir William a'Beckett, first Chief Justice of Victoria, was appointed in 1851; Sir Valentine Fleming was nominated Chief Justice of Tasmania in 1856; and in 1857, the first Supreme Court was opened in Brisbane, although the first Chief Justice, Sir James Cockle, was not appointed until 1862, after the separation of the two colonies. Sir Archibald Caul Burt became first Chief Justice of Western Australia in 1861. The second holder of the office of Chief Justice of Victoria was Sir William Foster Stawell, who was on his retirement succeeded by the present Chief Justice, His Honor Mr. Justice Higinbotham. In New South Wales, Sir Alfred Stephen retired from office in 1873, and was succeeded by Sir James Martin, on whose death, in 1886, the post—being declined for the second time by the Right Honourable William Bede Dalley, was conferred on Sir Frederick Matthew Darley. The present Chief Justice of South Australia is His Honor Samuel James Way. In Tasmania, Sir William Lambert Dobson holds that position; in Queensland, Sir Charles Lilley; in New Zealand, Sir James Prendergast; and in Western Australia, His Honor Alexander Campbell Onslow. As soon as the local Bar was strong enough to furnish competent judges, there naturally grew up an indisposition to the importation of lawyers to fill the higher offices. For many years past none but local men have been appointed, except in the Crown colonies of Western Australia and Fiji; and the local Bars have proved quite equal to the task of providing judges. Western Australia has lately been granted Responsible Government, and henceforth the custom of the other colonies of Australasia will doubtless be followed in this as in other matters. Political preferences have, in many instances, influenced the appointments; but, taken as a whole, the Bench of Australia has commanded the respect and confidence of the people. The Judges have emulated the seriousness, the dignity, and the impartiality that distinguish the English Bench. It is almost unnecessary to say that, except in certain details, the law of the Australian colonies is in substance identical with that of England,—one of the more noticeable of the

exceptions being the legalization of marriage, in certain of the colonies, with a deceased wife's sister. The peculiar boast of Australians in legal matters is, of course, Torrens' Act, for the expediting of the transfer of real estate. Sir R. R. Torrens was for some years Collector of Customs at Adelaide, where his duties brought him in contact with the shipping interest. He was led to apply the method of the transfer of shipping by registration to the transfer of land. It took many years to perfect the theory, which was not definitely accepted by the South Australian Legislative Assembly until the year 1858.

LITERATURE AND ART.

THE conditions of colonization in Australia for many years after the date of the first settlement were not such as to favour any remarkable development either in the field of literature or of art. We have seen that fortunately for the material progress of the colonies, they received the kind of population best suited to do the pioneer work of colonization, rather than a cultured or leisured class with the time and taste to cultivate the more polished graces of life. The rough-and-ready duties which the first colonists were called upon to discharge, and the lives of toil and active effort they were compelled to lead, were more favourable to the development of a hardy race of practical men than to the pursuit of those studies that have their issue in either literary or artistic performance. In this, of course, the Australian colonies only followed the example of the older countries of the world. It was necessary that the Continent should be made habitable by the labour of men's hands before a population could be settled within its borders.

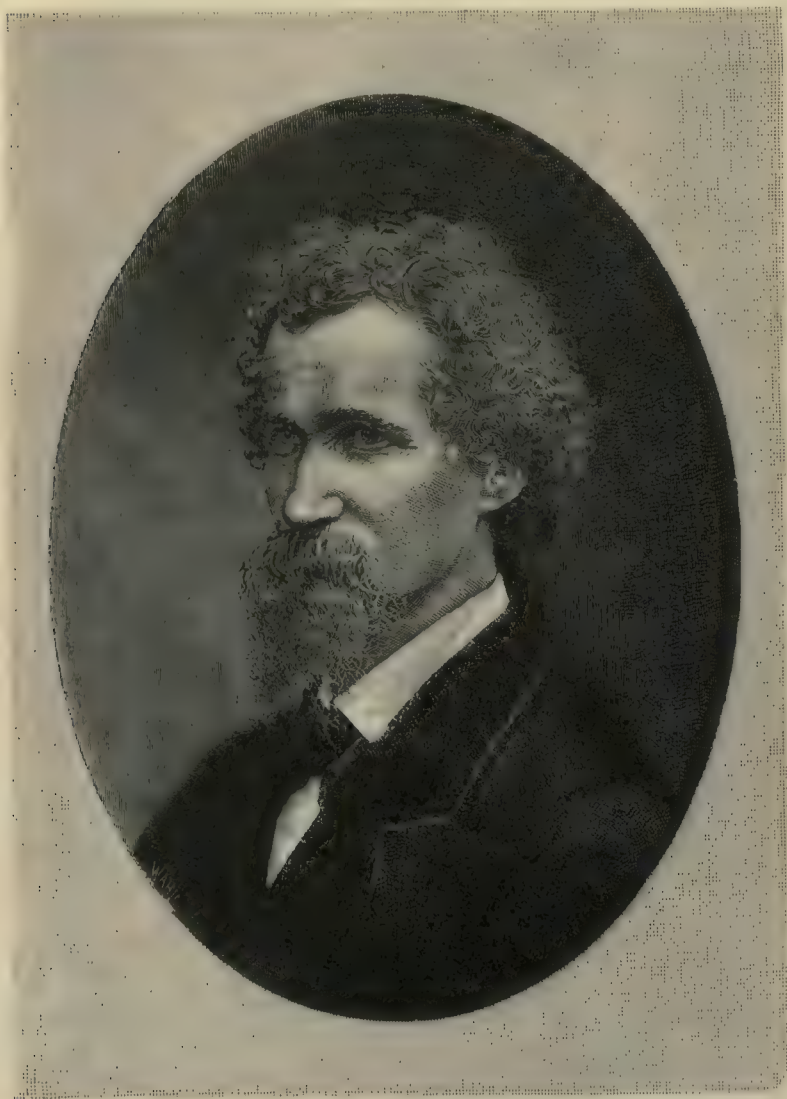
We have seen that the first comers proved themselves capable of the discharge of this pioneer duty, and it was not to be expected that

in the midst of such a population that the finer flower of civilization would show itself until some time after the preparatory stages had been passed. Wealth and leisure came afterwards. Fathers left to their sons the heritage of the results of their original effort. The labours that confronted the first comers were passed on to the succeeding generation in the shape of results ready to its hands, and the sons of those who first reclaimed the primeval wastes for settlement found that they could enjoy the leisure and means of which



ADAM LINDSEY GORDON.

the enterprise of their forefathers had laid the foundation. But although this process of evolution was always going on, its results did not come either with the first or the second generation. The continual influx of immigrants kept the colony for many years in its initial stage. The demand in the new country was for employment rather than for culture, and each decade brought its contribution of colonists who left the old



HENRY KENDALL.

land and sought the new, not so much to find the comforts of life as its necessities, and to seek leave to toil for bread rather than to enjoy those intellectual luxuries of which literature and art are the outcome. It would, however, not be correct to assume that amongst the new-comers to this new land there were none possessed of great talents and high culture. The history of our political institutions convince one of the contrary. Leichhardt has borne witness to the culture of many of the early pioneers, whose stations he visited on his overland journeys. Sir Thomas Mitchell, the celebrated explorer, was a man of varied learning, whose translation of the Portuguese poet, Camões, is still consulted by scholars. Again, there can be little either of literature or of art without a strong inspiration derived from national pride and belief in a national

future. Our first pioneers had so little, that one of the most admired productions of Australian verse, "A Voice from the Bush" voices only a vain regret for the land where the poet had his birthplace. As, moreover, the social conditions of the mother-colony evolved themselves, the popular mind had enough to engage its attention in the formation of its political and legal systems, in the development of its religious institutions, in the adaptation of the machinery of State education to the wants of the growing community, and, in general, in building up that semblance of nationality which should one day grow into the empire, whose hopes and aspirations are beginning to fill the dreams and nerve the efforts of Australian artists and authors. And until these various interests had time to solidify themselves, the day had not come to look beyond them.

It is our boast as a people that the demands of the masses of the population for educational facilities have ever been met with promptness by the State, and now that its duty in this respect has been efficiently discharged, we may be said to have entered

fairly upon that stage of social development when the leisured classes of the community are called upon to assist by their co-operation and sympathy in the development of the higher standards of taste, and in the encouragement of Australian literature and art.

It is only within the past thirty years that even the feeblest efforts have been made at the production of what may be termed a native literature. The profession of letters, more than any other, perhaps, lives on the sympathy and interest of the cultivated classes in the population. Amongst a people whose culture was small, therefore, it can

be readily understood that little or no effort was put forth in this direction, while the one or two dreamers, who really made any attempt at fine literary work, have found the only issue of their day-dreams in obscurity and wretchedness. This is the sad story told of most of those whose names have come into prominence in connection with the work of the pen in Australia. Now and again men have come to the colonies—like the Howitts, Henry Kingsley, and the author of "Orion"—with the capacity, which they have proved sooner or later, for different kinds of literary work; but no field for their talents existed in these new countries, and what they have done has gone to enrich the stock of literary wealth elsewhere. Again, we have had workers who have cast in their lot with us, and sought to live by the product of their pens in the midst of a community en-



MARCUS CLARKE.

grossed with the practical pursuits and business cares of life. These have remained with us, but no demand offered for the better work of which they may be supposed to have been capable. Such men as these have been only a degree better in their circumstances than the occasional man of fine taste and exquisite capacity, who, bred in the colonies under their then unfavourable conditions, yet showed in several instances touching indications of the rarest promise, that were destined to wither under the cold breath of popular neglect before they had time to develop into something tangible and real. Among such was the ill-fated Daniel Henry Deniehy, whose literary remains evidence the possession of a fine critical faculty and delicate scholarship, as well as the most remarkable range of information that has fallen within the record of Australian experience. No one who has, by accident or otherwise, been fortunate enough to have the opportunity of reading the fugitive papers of this frost-bitten genius can repress the tribute of a sigh to such wasted gifts and ill-acknowledged merit.

As a writer of graceful and sympathetic verse, again, Henry Kendall stands in the first rank of Australian *littérateurs*. He was quite a young man when, having sent some of his verses to the London *Athenæum* for review, that magazine spoke in the most favourable terms of his talent and of the promise it gave that the silent Continent would one day have a literature of its own, which might express in some articulate

way its unspoken mystery, and pourtray the new life and colour of the antipodes. From that time onwards Kendall continued to write and to publish volumes of verses. His "Poems and Songs" and "Leaves from Australian Forests" have attained a wide Australian circulation; and, though wanting perhaps in fibre, they have been taken to express the spirit of familiar places and the poetic side of incidents known to Australian life, and to have set their music to lyric words. His latest volume, "Songs from the Mountains," was well received shortly before his death, which occurred in Sydney in 1882. His life cannot be said to have been a success. Unfitted for the practicalities of life in a community where its practical side was necessarily everything, he was debarred by pressure of evil circumstances from giving his talents their fair exercise; so that, in common with the rest of the small band of Australian workers, his literary capacity is a matter to be estimated rather than assessed.

In Victoria, the name of Marcus Clarke is entitled to mention. His novel, "For the Term of His Natural Life," has been extensively read in England and America as well as throughout the colonies, and was recently quoted by a critic in the *Universal Review* as the only work of genius in the whole range of literature worthy of comparison with the immortal "*Les Misérables*" of Victor Hugo; and besides being translated into several European languages it has been more than once successfully dramatized. Its incident is taken from that sensational period of Australian history, the convict times; and the author's vivid descriptions from authentic records of the penal terrors of early New South Wales, Van Diemen's Land and Norfolk Island, are graphic and realistic in the extreme. Adam Lindsey Gordon, a Victorian writer of spirited verse, has also published one or two volumes which have a high degree of merit and considerable popularity among Australian readers. The topics treated, being mostly what are known as characteristic "bush" subjects, are full of local colour and *verve*. The career of this writer, and its termination, present another example of the unfortunate lot of literary workers in Australia. Gordon committed suicide at Brighton, near Melbourne, without ever having received any appreciable acknowledgment in his lifetime of the pleasure his verses have before and since afforded to thousands of readers with an eye for Australian colour and character in literature.

Besides those writers named, the Australian drama has been enriched by the production in London and America of "Captain Swift" from the pen of Haddon Chambers, a young Sydney writer. In the domain of fiction there are few names better known among modern novel-readers than that of Rolf Boldrewood, whose "Robbery Under Arms," and other works, enjoy almost a European reputation. Mrs. Campbell-Praed, "Tasma" and "A.C.," are also widely-read Australian novelists.

There have, of course, been, and are, many others, whose pens have produced good work, as well as some who have published noteworthy volumes both in prose and in verse. The columns of the daily and weekly Press in Australia have, from time to time, contained fugitive pieces of fine literary work, of which the merits have been acknowledged by republication in England and America. Among the writers of these may be named Mr. Brunton Stephens, of Brisbane, whose "Convict Once," published in the form of a volume, has been received with praise by English and other critics. The "Ranolf and Amohia" of Mr. Alfred Domett, of New Zealand, has also been well received in

England. To continue the list of living writers would, however, be invidious. Our efforts at the formation of an Australian literature, so far, have been tentative, and our performance up to the present, it may be said with all respect, has not been commensurate with our promise. The reasons for this have already been indicated. A great deal of effort has been put forth in the name of Australian literature, partly by local writers, but still more by casual visitors, which



THE INTERIOR OF THE SYDNEY ART GALLERY.

has done more to retard progress than to advance it, and by which outside critics and observers of our progress may easily be misled into a hasty error of judgment. Other writers, again, whose education and mental training have been obtained under other than Australian skies, have settled in the colonies and produced literary work of varied quality there. They have brought with them their old habits of thought, influenced by natural and other associations of a kind entirely different from our own. These literary producers have never done characteristically Australian work, for this one all-sufficing reason: and to this cause, indeed, if to no other, may be attributed the absence, so far, of a distinctive school of Australian literature. The real literary workers of Australia have been very few, and anything in the shape of an anthology must for the present be misleading. Any attempt of the kind, therefore, whether proceeding from want of judgment or a less excusable motive, is to be deprecated by those who desire to see an Australian literature form itself under fair conditions.

We have said already that the practical exigencies of life in Australia have to an extent precluded any hope until very recently of anything like a distinct school of literature. Another cause has been the absorption by the newspaper Press of most of the literary capacity of the colonies. Those who desire to live by the pen in Australia find that the flourishing metropolitan newspapers, which provide so generously for the reading wants of the people, offer what is really the only market for their literary wares; and continuous newspaper work is proverbially fatal to characteristic literary effort. The Press of Australia had its origin in the old *Sydney Gazette*, published in the early stage of settlement. It was followed by the *Australian*, issued by Messrs. Wentworth and Wardell in the time of Governor Darling; and the *Monitor*, established by Mr. Sydney Hall, a little later on. The action of these papers brought on a conflict with authority, which led to several prosecutions for libel, and an attempt to place a prohibitive tax on newspapers which was frustrated only by the public-spirited action of Sir Francis Forbes, then the Chief Justice of the colony. Governor Bourke recognized the freedom of the Press, and shortly afterwards the *Sydney Herald*—now the *Sydney Morning Herald*—was established in 1831. Other papers continued to appear, and in 1843, the *Sydney Gazette*, the oldest paper in the colony, was published for the last time. Among the more noticeable of the new journals was the *Atlas*, perhaps the most remarkable newspaper Australia has yet produced. It was contributed to by the most capable men of the day, among others being Robert Lowe, now Lord Sherbrooke; Sir James Martin, late Chief Justice of New South Wales; and the owners of such well-known Australian names as Forster, Deniehy and Butler. The *Empire* followed in 1850, edited by Mr. Henry Parkes, and this journal, afterwards incorporated with the present *Evening News*, engaged the services of the most prominent men of what was known as the Liberal party of the day. The first issue of the Melbourne *Argus* under that name appeared in 1846. The Melbourne *Age* dates from 1854; the *South Australian Register* from 1837; and the *Brisbane Courier* from 1846. Other metropolitan papers in the colonies and New Zealand were founded from time to time. The efficiency of the newspaper Press of Australasia, one of the acknowledged marvels of the colonies, is due, in the first instance, to the enterprise of the proprietors of the great journals of Sydney and Melbourne, and to the high ideal of journalistic achievement at which they aimed. Our

rapid growth in wealth and increase of population have, of course, fed this enterprise lavishly, and generously aided toward the realization of the standard at which the founders of such papers as the *Sydney Morning Herald* and the Melbourne *Argus* aimed. But the colonies have been so far fortunate in the fact that the interests of journalistic enterprise have fallen into the hands of men with large views not only for the immediate present but for the future—men who have ever made it their first endeavour to ensure a healthy tendency and an honourable tone in the newspapers they conducted, at first with such varying fortunes, but eventually with such signal success. The chief cities of all the Australian colonies can, therefore, boast of the possession of influential organs of public opinion, of the character of which the two oldest papers just named may be taken as fitting representative types. Beside the more important metropolitan journals there are in all the colonies a large number of provincial and suburban papers which cater for the wants of the reading public in the country as well as in the neighbourhood of large cities. Every country town has at least one, often two, and sometimes three newspapers of this kind, many of them efficiently conducted and well printed, and all earnest advocates of the local interests of the town or district they represent. Some of these provincial organs, like the *Maitland Mercury* in New South Wales, for instance, and the newspapers of Ballarat and Sandhurst, are old-established and valuable properties, commanding a wide influence and an extensive circulation. The provincial journal usually identifies itself with the characteristic pursuit or interest of the people in whose district it is established, and its first object is, of course, to provide the desired information on this particular subject. But to this is added a keen interest in the politics of the country and an eager discussion of the test questions of the day, among which some phase of the land law almost always finds a place. In the smaller townships the local paper is usually conducted by a practical compositor, on somewhat of the same lines that are followed in parts of the United States, and from very humble beginnings these sometimes develope with their surroundings into papers of considerable importance to the district in which they are published. In this way the settled parts of the colonies are well covered by the newspaper Press in one or other of its forms, and even the most sparsely inhabited portions of the country are not left without some medium of public opinion. One result of this state of things is to be traced in the lively interest taken in public affairs throughout the colonies, and the close acquaintance of the people at large with contemporary politics and the current events of the time.

The causes that have operated to retard the formation of a distinct school of Australian literature have been equally active in repressing the development of Australian art. The art of a country is the outcome of its culture and of its leisure, and we have seen that for the first three-quarters of a century the Australian colonies had but little of the one and nothing of the other. Artists occasionally found their way to the antipodes, and some of them, like Sir Oswald Brierley and a few others, have since won a fame in England that the Colonies could never have given them. But these were merely fugitive visitors, and their presence in Australia in those days was never remarked. Yet for many years a good deal of quiet artistic effort went on in an unobtrusive way, and now and then men of means and culture who had found their way to Australia brought good pictures to the colonies, and by their taste and appreciation

encouraged these silent workers. Art galleries have been founded in most of the colonial capitals, but they consist in the main of collections of specimens of the work of foreign artists, with a few pictures painted by some talented Australians; but these collections of pictures can no more be regarded as evidencing the progress of Australian art, than the public libraries of the various colonies can be regarded as evidencing the advance of Australian literature.

The first colony to bring together a noteworthy collection of pictures into a public gallery was Victoria, and for a long while the National Art Gallery in Melbourne was the centre of artistic interest in Australia. The National Art Gallery in Sydney grew out of the institution known as the New South Wales Academy of Art, established in 1871, which now and then brought together the works of local men in that and the neighbouring colonies for purposes of public exhibition. The Government aided it with a grant of £500 in 1874, and another of £1,000 in 1875. From the International Exhibitions in Sydney and Melbourne in 1879 and 1880, however, really dates the awakening of anything like an intelligent public interest in the progress of art in Australia. The fine collections of pictures by leading European artists which were then for the first time exhibited to a colonial public, directed the popular taste in these matters, and brought those who had hitherto known of the world of art only through books into actual contact with the foreign artistic achievement of the age, and thus stimulated local efforts. The first sign of this awakening of taste was the purchase of some of the best pictures for the Sydney and Melbourne Galleries, and from this point the National Gallery of New South Wales dates its origin proper. The new institution absorbed the old Academy of Art, and with the best of its pictures, added to judicious purchases at the Exhibition, and subsequently of pictures and statuary through a selection committee of leading artists in England, developed in the course of a few years into the present promising collection, which is now valued at upwards of £50,000. The vote of Parliament for Art purposes is administered by a board of trustees, under whose authority the subsidy allotted for the purpose is carefully expended. The Galleries in Melbourne and Sydney are continually being added to by the purchase of new pictures, and every year these national collections become more valuable and more intrinsically interesting. Several of the other colonies have also made praiseworthy efforts in the same direction, and some of the provincial towns, like Ballarat in Victoria, have achieved some progress towards the formation of galleries of art. Here and there in the larger Australian cities, too, there have for years past been private citizens of wealth and taste who have given money and time to the collection of works of art, and who have in times past allowed the public free access to their galleries, or by gifts to public institutions increased the art-wealth of the colonies. From time to time, also, collections of valuable pictures have been gathered from the selections at Home and sent out to Australia, where the opportunity thus offered the people of the colonies to see what is going on in the art-world has done much to educate the popular taste and cultivate the artistic perceptions. In this way the work of the development of this side of the Australian character has gone on, until the prospect of its further development in the future has arrived at its present promising stage.

A result of this awakening of the artistic taste in Australia has been the formation

of several flourishing art societies in Sydney, Melbourne, and elsewhere. The artists of the Colonies work cordially together to advance the interests of their common calling and to develop the public taste in this direction. One of the most popular means to this end is the annual exhibition held in these two cities, to which art-workers all over the Colonies send their pictures and other evidences of effort. After a judicious process of selection by an accredited committee, the best work of the year is exhibited to the public, and the growing taste of the population is abundantly evidenced by the interest taken in these annual exhibitions, as well as by the increasing sale which the better artists obtain for the pictures brought directly under the notice of the people at large. As in the case of literature, so in art, it has been remarked that so far the work of



THE INTERIOR OF THE PRINCESS THEATRE, MELBOURNE.

local artists has not yet reflected distinctively the character and colour of life and nature in Australia. It has been a charge against local painters that their art is largely imitative, and that, so far, they have not yet adequately profited by the novel conditions of artistic effort in a new country. Every successive year's exhibition, however, shows that progress is being made in this direction, as well as in others; and the chief difficulty in the way of the more advanced among Australian artists is now the tacit prejudice on the part of those who might be the wealthy patrons of our Australian art school, against anything that does not come from the older art centres of the world. Such a prejudice as this, so long as it continues to exist, cannot fail not only to prove fatal to the best representative work that might be produced, but to the prospect of anything like distinct individuality on the part of art-workers in Australia in the future. Just as it has passed into a by-word that a book by an Australian author must bear the imprint of a London publisher to have any chance of general acceptance in the Colonies,

so it would seem that the tendency of would-be patrons of art in the direction just indicated will have the result of confining local effort to the mere imitation of Old World models to the neglect of the true aims of art. A distinctively Australian school of art can never hope to form itself in the face of such constant discouragement. One of the best signs for our artistic future is the fact that the local societies make a laudable effort to withstand this undesirable tendency, and even at the risk of some temporary sacrifice, to cultivate their vocation in an honourable spirit of independence.

The Australian is music-loving, and has been so from the time the first settlers pitched their tents and built their huts. True, the general musical taste has not reached any high standard, but the spirit of the love of song is in the people, and every year, as time goes by, gives signs of a gentle but genuine growth of that keen appreciation of the higher graces of music which surely develops into fervour and passion. In the bush, now as of old, the fiddle and the concertina have their honoured places, and many a night is made merry by happy-hearted singing, while in the centres of population, and especially in the cities and prosperous towns, the pianoforte holds sway to an extraordinary extent, almost every second house rejoicing in the possession of a good or bad instrument. Musical societies are as "plentiful as blackberries," the late Mr. William Cordner, of Sydney, a sound and enthusiastic musician, who arrived in 1854, being the father of these associations. All the cities and not a few of the towns of Australia and New Zealand have their flourishing amateur musical societies, and the example of Melbourne in establishing liedertafels for male voices only has been successfully followed by Sydney, Adelaide and Brisbane. Some of the capitals have four or five societies. Sydney, for instance, has two liedertafels, several choral societies and one philharmonic society, the aim of the latter being the production of oratorios and other great works. The Sydney Philharmonic Society, which, under Signor Roberto Hazon as conductor, has attained the first position in the Colonies, has a chorus of five hundred voices and an excellent amateur orchestra. There are in the Colonies hundreds of fine voices, hundreds of naturally-talented players, and with good examples such as the visits of great artists afford, and patient study, cultivation and development in the right direction are rapidly doing their work. The soprano voice is the best in the colonies, and the baritone comes next. Tenors of anything like quality are very rare, and the same remark applies to the contralto. Of basses, with limited range, there is an abundance. It cannot be said that Australia has yet given the world any great musical work. A recent visitor, Mr. Fred. Cowen, an English composer of some celebrity—declared that there was nothing in Australia to inspire the musician; but this is mere assertion, for the Land of the Sunny South, with its mystic past, the romance of its discovery, and the striking beauty and poetic suggestiveness of its scenic characteristics, should surely not be without fascination to the genius of a musician in search of a theme. Up to the present, the talent of colonial musicians has been confined mainly to the composition of cantatas—some of unquestionable merit—and Masses, the most meritorious among the religious efforts being the Mass composed by John A. Delany, a talented young Sydney musician. A large number of songs and miscellaneous concert-room instrumental pieces, and two or three operettas have been thrown off during the past twenty years, and in the song-writing Sir William Robinson, Governor of Western Australia, and ex-Governor of South Aus-

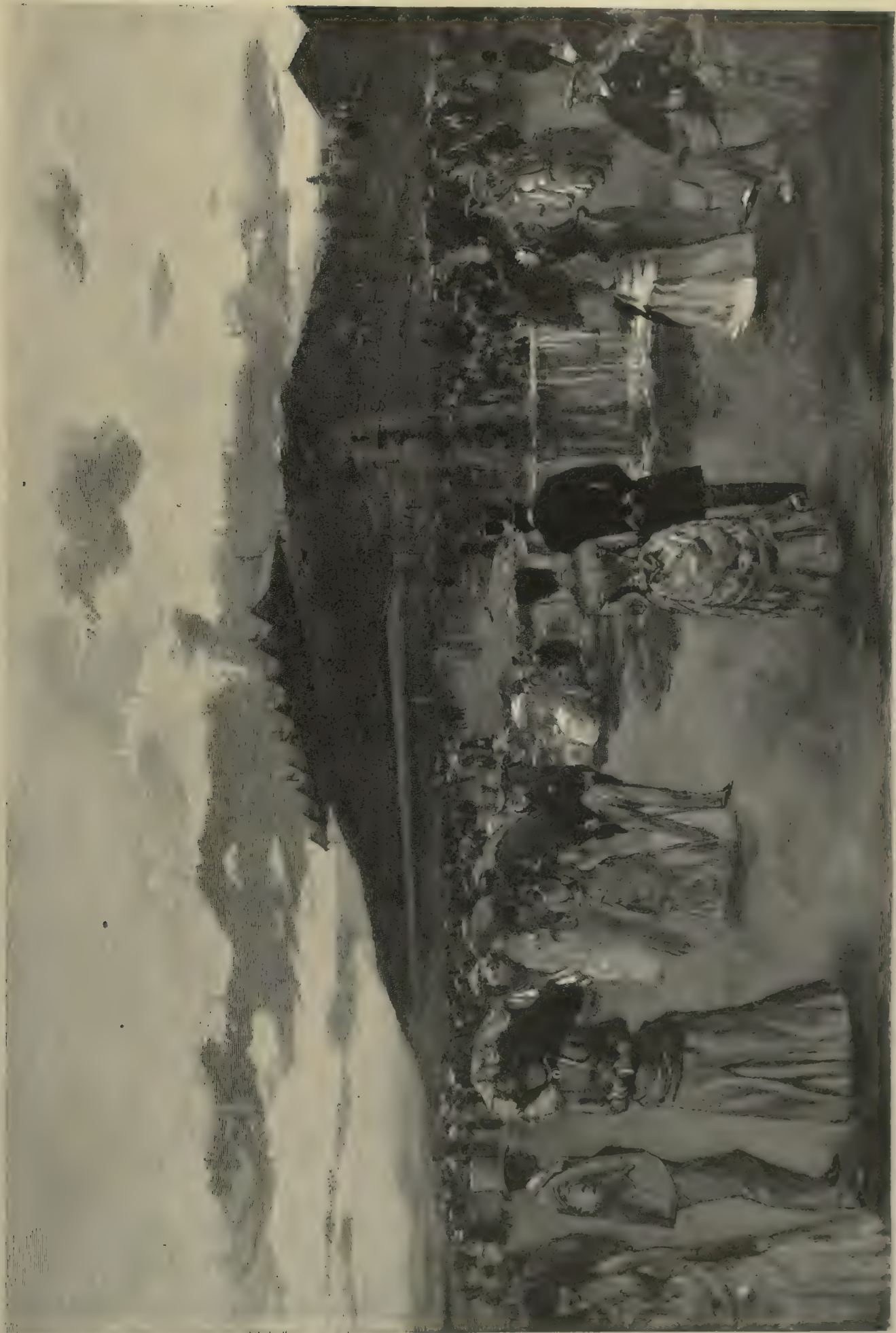
tralia, has specially distinguished himself. The only compositions of any note which Australia can claim, though not strictly the work of her own sons, are the opera of "Maritana," by William Vincent Wallace, partly written in Sydney in 1840, and two oratorios, "David," by Charles Horsley, and "The Crown of Thorns," by Charles Packer.

Catherine Hayes, whose rare gifts were only equalled by her great public generosity, was the first really great singer who visited Australia. Her concerts in 1854 and 1856 were wonderfully successful, and it is told of those triumphs of hers, in the days of the gold discoveries, that in place of the conventional tributes of flowers small nuggets of gold were sometimes showered on the stage. After Catherine Hayes, there was a succession of fine vocal artists, and old colonists recall with pleasure the names of Sara Flower the contralto, Madame Bushelle, Anna Bishop, who was the first to introduce oratorio music, Farquarson the baritone, Madame Carandini, Madame Simonsen and the Howsons. Later came Agatha States, Ilma De Murska, Carlotta Patti, and Sussini the great bass, Antionette Link and Herr Elmblad, and, in 1889, Charles Santley, the eminent baritone, commenced his twelve months' brilliant tour, Madame Patey following in 1890. The two great English singers named, achieved their completest successes in oratorio, notably in "Elijah" and "The Messiah." Among the celebrated English and foreign instrumentalists who have won fresh laurels in the Colonies, may be counted Wilhelmj, Remenyi, Lady Hallé (Norman Neruda), Camilla Urso, Martin Simonsen and Horace Poussard, violinists; De Munck, the 'cellist; Bochsa, the harpist; Levy, the cornet-player; and such pianists—taking them in the order of their visits—as Arabella Goddard, Robert Heller, Paolo Giorza, Carlotta Tasca, Henry Ketten, Henri Kowalski, Madame Olga Duboin, Max Vogrich, Madeline Schiller and Sir Charles Hallé, the latter making his first visit in 1890. In the way of organists we have had men of exceptional talent in Charles Horsley, William Cordner, John Hill, W. T. Best and Augustus Wiegand. To William Saurin Lyster, a Dublin man, the most enterprising of managers, belongs the credit of introducing English and Italian opera, though it must be admitted that the Carandini Company had led the way, with H. Lavenu as conductor, in 1859. Lyster's first company—he brought out four or five afterwards—was composed of Henry Squires, a tenor who has never been excelled on the Australian stage, Lucy Escott, Mdle. Georgia Hodson, Madame Rosaline Durand, Madame Ada King and Mr. Fred. Lyster. The Lyster Italian company which followed included Vitelli, Devoti, D'Antoni and Bertolini. To this spirited manager, who mounted the operas in a style worthy of London, the Australian public were indebted for the privilege of hearing not only all the old favourites but such modern works as "Lohengrin" and "Aida." Three Italian companies have been brought out by other managers since Lyster's death, the last in 1889. Two prominent London composers and conductors have within the past five years paid the colonies professional visits—Mr. Fred. Cowen, who was specially engaged to conduct the Melbourne Exhibition Orchestra, which included a number of English players, in 1888, and Mr. Alfred Cellier, who conducted a series of operatic performances. Melbourne has been accorded the palm for practical appreciation of music. There they have a permanent "national orchestra" of professional musicians for regular concerts throughout the year, maintained partly at the public expense and partly by private subscriptions, and the conductor, Mr. Hamilton Clarke, who was brought out from England, receives

a handsome salary. In Melbourne, too, the munificent dedication of £20,000, by the Hon. Francis Ormond to found a Chair of Music at the University, has led to the appointment of Mr. G. W. L. Marshall, late of England, at a salary of £1000 a year. A noteworthy Australian musical event was the opening of the great organ in the new Town Hall of Sydney, in August, 1890. Mr. W. T. Best, the veteran organist of England, on a special engagement, "opened" the huge instrument, which is the largest in the world, an audience of over 4000 people being present at the first recital. This organ, built by Hill and Sons, of London, has six key-boards and one hundred and twenty-six stops. The sixty-four feet pipes are a feature. In the Melbourne Town Hall, a building holding over 3000 people, there is an organ, the second largest in Australia, with five key-boards and sixty-six stops. Both in Sydney and in Melbourne city organists are appointed to give weekly recitals, the Sydney salary being £500 a year.

That Australia is under an immense obligation to the gifted and experienced *artistes* who have from time to time visited the colonies is a matter beyond dispute. The Australians acknowledge their indebtedness, and they have begun to give their own native talent to the older countries in return. Some few years ago, Amy Sherwin, "the Tasmanian Nightingale," gained her laurels in England and Europe, and now a Melbourne lady, Madame Melba (Mrs. Armstrong), who won her way to the front in two years, occupies a position in the operatic world second only to Adelina Patti. John Kruse, a young Victorian, has made a name in Europe as a violinist, and two Australian "phenomenons," Elsie Hall and Bessie Doyle, who were sent to Europe by public subscription while mere infants, have given evidence of astonishing talent as instrumentalists. Several young singers hailing from Victoria and New Zealand, it may be added, have successfully opened professional careers in London.

The history of the Stage in Australia is rich in the records of great names and performances of commanding excellence. Curiously enough, the drama has a place in the first chapter of the story of the settlement in Sydney, for it is set forth, and not without a touch of humour, that the first theatrical performance was in celebration of the Sovereign's birthday, on the 4th of June, 1789, the play being Farquhar's "Recruiting Officer," and the actors a number of prisoners. A species of "free and easy" theatre sprang into existence in 1796, but on account of certain abuses it was suppressed by the Governor in 1798. The year 1833 saw the first legitimate play-house—the Royal—opened in Sydney, and the Victoria was built five years later. Melbourne made its start in this direction in 1845 with the Queen's, and George Coppin's theatre was in evidence in 1854. A review of the drama in Australia calls forth a splendid procession of men and women who trod the stage during the period extending from the fifties to the nineties, and on the lives and genius of nearly all of whom the dark curtain has been rung down. Standing out most prominently is the imposing figure of Gustavus Vaughan Brooke, the gifted Irishman whose powers in tragedy and comedy were equally great, and who was the first man in Australia to read Shakespeare "by flashes of lightning." Brooke, in 1855, whose name has become historic, gave the legitimate drama its first real start, and with his memory are associated remembrances of Fanny Cathcart, Julia Matthews—an Australian, by the way, and a celebrated actress—Francis Nesbitt, G. H. Rogers, Mrs. C. Jones, Mrs. Guerin and many other sterling actors. After Brooke, in the legitimate walk,



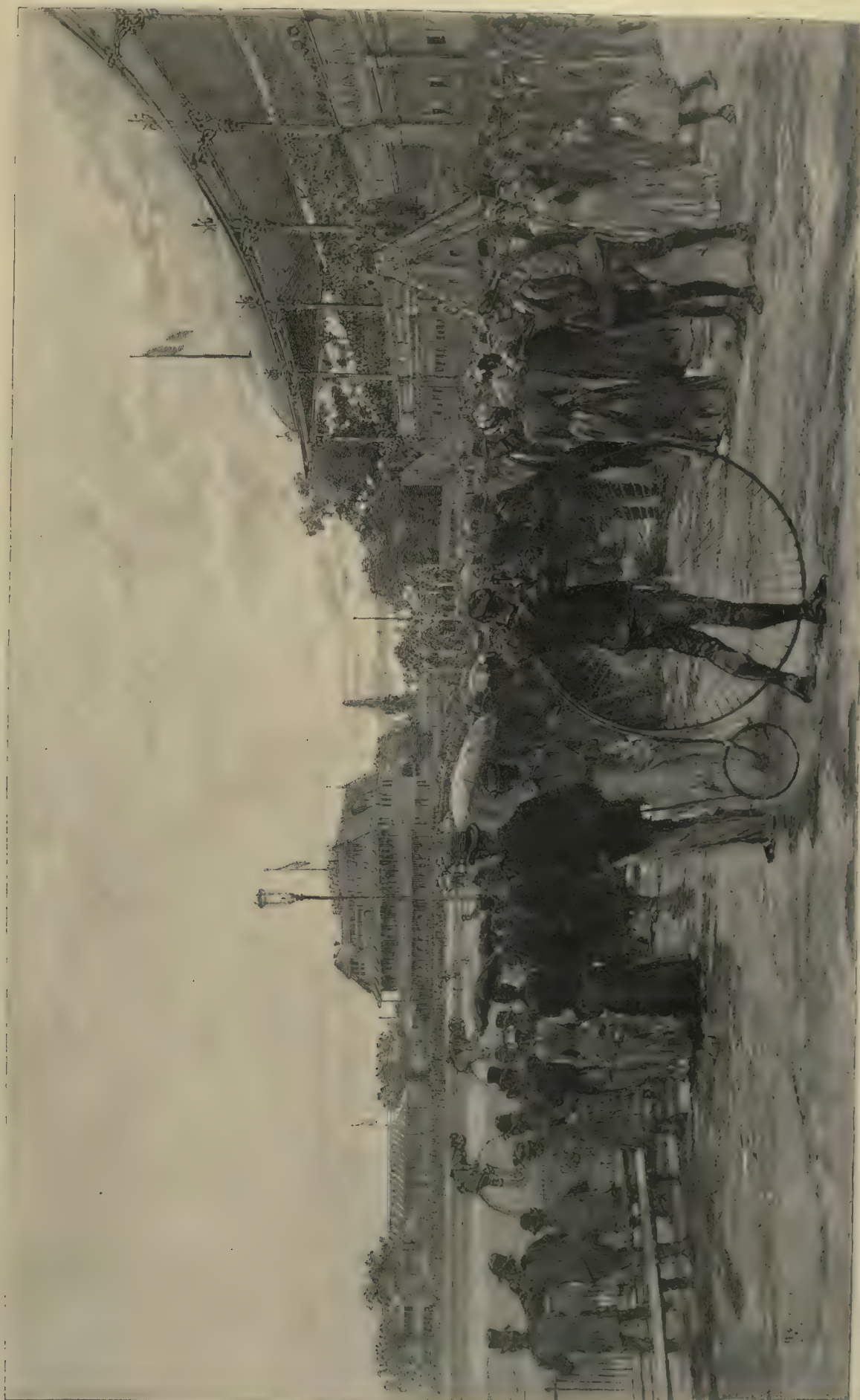
THE FLEMINGTON LAWN ON "CUP" DAY.

came Barry Sullivan, Charles Kean and Mrs. Kean, Joseph Jefferson, Dillon, Anderson and Walter Montgomery. A later period brought the famous Adelaide Ristori with her Italian company; the German actress, Jaunescheck, at the same time wooing the favour of Australian audiences. Then we have had Miss Cleveland, J. B. Howe, Herr Bandman, Henry Neil Warner, Adelaide Bowring, Edwin Adams—the American tragedian—Alice Lingard, B. Fairclough, William Hoskings, Mary Gladstane, William Creswick—the last of the old English tragedians—George Chaplin, Augusta Dargon, George Rignold, James Bartlett, Mrs. Scott-Siddons, and within the past few years Wybert Reeve, Alfred Dampier, Mrs. F. Bates, Helen Ashton, Ada Ward, Genevieve Ward, William Vernon, Charles Pope, Louise Pomeroy, Signor and Signora Majeroni, Janet Achurch, Olga Nethersole, William Rignold, Charles Cartwright, Kyrle Bellew, Mrs. Brown-Potter, W. E. Sheridan—the great “King Lear”—and George C. Miln, the two last named being the finest Shakespearian exponents of later times. The year 1891 will be a memorable one, for it witnessed the artistic triumph in the Southern World of Sara Bernhardt, the most powerful of the modern French school of actresses.

Were Comedy to wave her wand she could summon among her supporters in Australia, in spirit at least, for many of them have passed away, Charles Matthews, the first and the greatest of the merry band, Sir William Don, Dunn, Drew, O'Neill and Rogers—the prince among the stage “old men”—George Coppin, Dick Stewart and Charlie Young, William Andrews and G. R. Greville, Wheatleigh and Hydes, Thorne and Appleby, Frank Bates and Phil Day, Horace Lingard and Sothern, “Teddy” Royce, Roberts and “Billy” Elton, John L. Hall, Sam Emery, H. R. Harwood and Grattan Riggs, John L. Toole—who made his tour in 1890—and George Anson, the latter the reigning favourite. Among the miscellaneous “stars” who have visited the Colonies, the late Dion Boucicault, whose tour in 1885 was a phenomenal success, shines out, and the names of Charles Warner and Jennie Lee may be bracketed, the former making his great hit in “Drink,” and the latter in “Jo.” Maggie Moore and J. C. Williamson had a sensational run with “Struck Oil,” a play which has been several times revived. The advent of the London Comedy Company in 1879, with Blanche Stammers as the leading lady, and poor Fred. Marshall, the master of a hundred parts, as the leading comedian, marked a new era of the dramatic art, and the representation of the finest of the old and the best of the new comedies has since been carried on with sustained success both in Sydney and in Melbourne by the admirable company organized and directed by two clever actor-managers—Robert Brough and Dion Boucicault—the latter a son of the late veteran of that name. Mrs. Brough and Mr. George Titheradge merit special mention for their large share in the work of popularizing modern comedy of the “society” order in the Colonies. Australia has had two visits—in 1888 and 1891—from the London Gaiety Company, with Nellie Farren and Fred. Leslie as the leading lights.

Conspicuous among those who have made and left their mark in opera—the legitimate and comic—apart from the Italian companies, may be counted Fanny Simonsen, Rose Hersée, Annis Montague, Lillian Tree, Emily Melville, E. Soldene, Clara Thompson, Edith Pender, Pattie Laverne, Leonora Braham, Elsa May, Alice Barnett, Louise Lablache, Marian Burton, George Snazelle, Charles Turner and William Verdi. In this connection, some colonial operatic *artistes* who have held their own against the importations from

abroad should be mentioned—they are Nellie Stewart, who made a successful visit to



A BICYCLE RACE AT THE MELBOURNE CRICKET-GROUND.

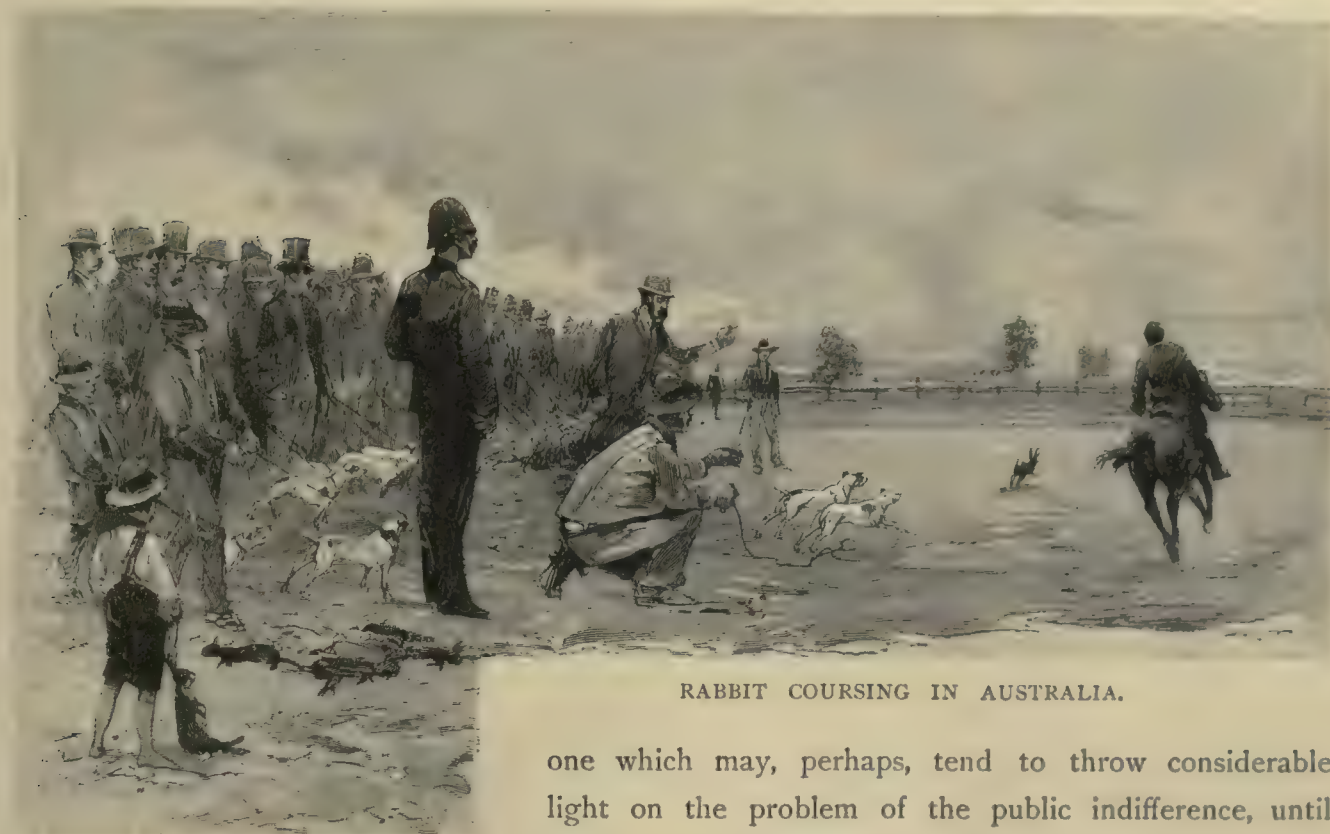
London in 1891; Alice Rees, Colborne-Baber, Frances Saville, Flora Graupner, Edward Farley, Armes Beaumont, Howard Vernon, Charles Harding, John Forde, Henry Stock-

well and John Gourlay. While touching on colonial talent, it may be recorded that besides giving the English dramatic stage Shiel Barry, one of its best character actors, Australia, from amongst her own children, has contributed to the ranks of the actresses of acknowledged merit Julia Matthews, Eleanor Carey, Kate Corcoran, Florence Colville, Maggie Oliver, Hattie Shepherd and Essie Jenyns. The extent of the support extended to the drama may be gauged by the fact that in all the chief cities there are several flourishing theatres—Sydney alone having eight—while almost every important country town boasts a temple of Thespis of some sort. Several of the buildings are costly structures, and in point of size and architectural attractions compare favourably with similar edifices in other parts of the world. Her Majesty's, in Sydney, and the Princess, in Melbourne, hold the first places in these cities. The public taste may be described as "omnivorous," every form of entertainment receiving liberal patronage. Comedy in drama and in opera, especially in the latter, is extremely popular, but "the legitimate" in the dramatic and lyric art does not pass without full recognition. Shakespeare, when well acted and properly mounted, pays, the two latest revivals on an elaborate scale of "Julius Cæsar" and "Anthony and Cleopatra," in Sydney and in Melbourne, being completely successful. Among colonial playwrights those best known are Haddon Chambers, Marcus Clarke, Walter Cooper, H. T. Craven, George Moreton, Garnet Walch and J. L. Farjeon. The drama in Melbourne owes much of its success to the veteran Mr. George Coppin, who introduced Brooke in the fifties, and whose enterprises have extended over several hundred thousand pounds.

Wealth and leisure have come to Australia now, and the prospect both for literature and for art gives fair promise of being a bright one. Fortunately, for the interests of the former at least, there have always been men of gentle tastes and a wide range of sympathies who have extended a noble aid to its early efforts. Certain names of prominent Australian citizens, to whom literature in the colonies is especially indebted, easily suggest themselves here, and claim the tribute of that recognition they so worthily earned. In Sydney, the late Nicol Drysdale Stenhouse was for many years known as the Mæcenas of Australian literature, a distinction nobly earned by his generous sympathy with all intellectual effort under its then existing unfavourable conditions. The late Right Honourable William Bede Dalley, P.C., was not only a literary worker himself, but a genuine and sincere colleague throughout his popular career of all who laboured in literary fields. In Victoria, the late Sir Redmond Barry was one of the foremost to advance the same interest by his sympathy and aid. To him was largely due the foundation of the present Melbourne Public Library and National Gallery, on the lawn of which institution a statue now stands to his memory.

It is to men like Barry, Stenhouse and Dalley, men of culture and refinement, of broad sympathies and artistic tastes, of accomplished scholarship and ripened experience, that we chiefly owe such small progress as we have already made. They supplied, in some measure, the counteractive of that public indifference which proceeded from the fact of the popular mind having been exclusively occupied with what are known by way of distinction as practical things. The evolution of social conditions is, however, bringing to the surface a more desirable state of affairs. That tangible aid of an active interest on the part of the public in what is being done, and in what is being aimed at, is

becoming day by day more definitely felt. The State has hitherto shown little or no interest in its literary workers, or in the cultivation of an Australian school of literature, and no attempt has been made to foster anything of the kind in the way adopted in other countries. One notable exception to this blank record of indifference was, indeed, provided in the case of Henry Kendall, who was appointed to an honourable post in the public service of New South Wales. But, in a general sense, it may be mentioned as a singular fact—and



RABBIT COURSING IN AUSTRALIA.

one which may, perhaps, tend to throw considerable light on the problem of the public indifference, until recent years, on the subject of literary culture and taste—that the Governments of the Australian Colonies have made no effort to foster, by the judicious use of the unlimited patronage placed at their disposal, the development of anything like a distinctive school of Australian literature. Other countries, and particularly the United States of America, where the democratic sentiment is at least as powerful as it is in Australia, have followed a wiser and more liberal policy in this regard. When it is fully recognized how much of the intellectual life of a people, outside of its mere material prosperity, depends on the encouragement and sympathy, on the part of the State and the public, for the efforts of literary and artistic workers in the Colonies of Australasia, it will be time to look for definite and characteristic results. The year 1891 saw the first attempt on the part of purely Australian painters to gain recognition abroad. The courage thus shown met with its reward, for the works of three young Victorian artists, Arthur Streeton, Longstaffe and Fox, were honoured by acceptance at the Paris Salon and the Royal Academy, London.

SPORT AND AMUSEMENT.

THE equable temperature and pleasant climate of the Australasian Colonies are eminently favourable to out-door pursuits of all kinds, and it would be strange if a young country so favoured, and inhabited by people remarkable for their healthful

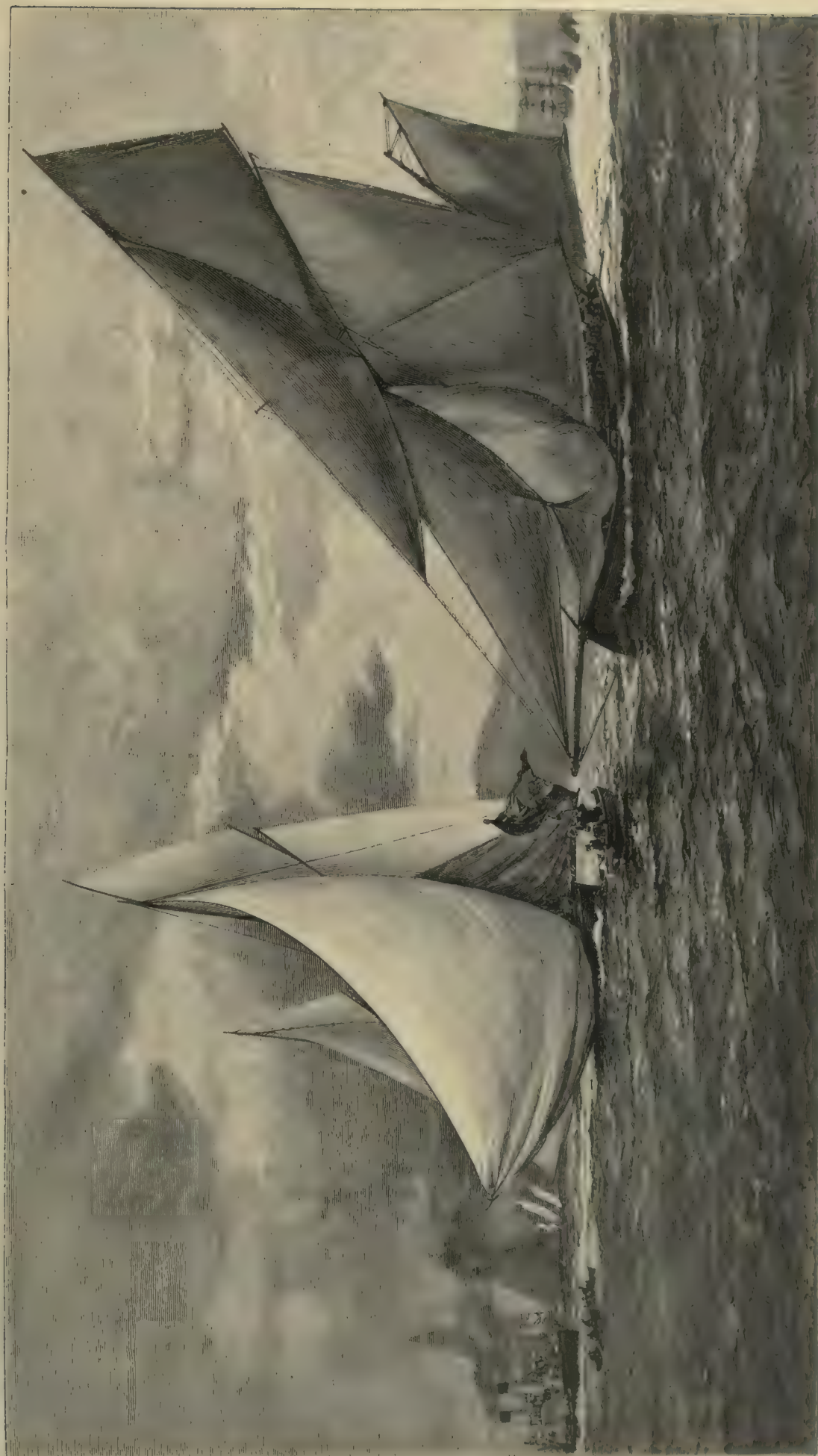
energy and enterprise, had not distinguished itself as one famous for its taste for sport and popular out-door amusements. There is no winter in Australia in the sense the term conveys to those who come from older lands; snow is a curiosity for most of the native-born; there is no rainy season, properly so-called, and all through the year the sunshine and clear air invite the young men of Australian cities to the sports of the field, and to the cultivation of all that pleasant business of recreation which in England can be pursued only during three or four months in the year. If the observant stranger, who makes one of those flying visits to the Australian Continent from the Old World that are every year of late becoming more and more common, were asked to name the distinguishing note of Australian character, as it superficially struck him on



PARADING A "CUP" WINNER.

a first acquaintance, he would probably be found giving an enthusiastic predilection for sport and out-door amusements unhesitatingly the premier place. Our national love for certain forms of sport has made the Australian name famous all over the world. Our cricketers, our foot-ballers, occasionally our race-horses, and last, but not least,

our scullers, have contested with the best material that could be brought on the fields, the race-courses and the rivers of England and America, and if they have not always won first place, they have, at all events, carried away the palm often enough to make their prowess respected, and their merits enthusiastically acknowledged. Team after team of representative cricketers has at various times gone to England to compete with the best players in the very home of English cricket; and more than once they have come home bearing the spoils of victors back to Australia with them. Foot-ballers from New Zealand have followed their example, showing that, in this respect at least, the most distant colonies have very little to learn from the mother-country. The most popular of our sports, that of horse-racing, has not yet reaped many laurels abroad. In June, 1891, Mons. Meg, a purely Australian horse from New South Wales, won the Queen's Gold Vase at the Ascot Heath meeting; this being the first colonial win in England. But in aquatics we may justly claim to have borne the palm of the world away, and our successive champion scullers have, one after



A YACHT RACE IN SYDNEY HARBOUR.

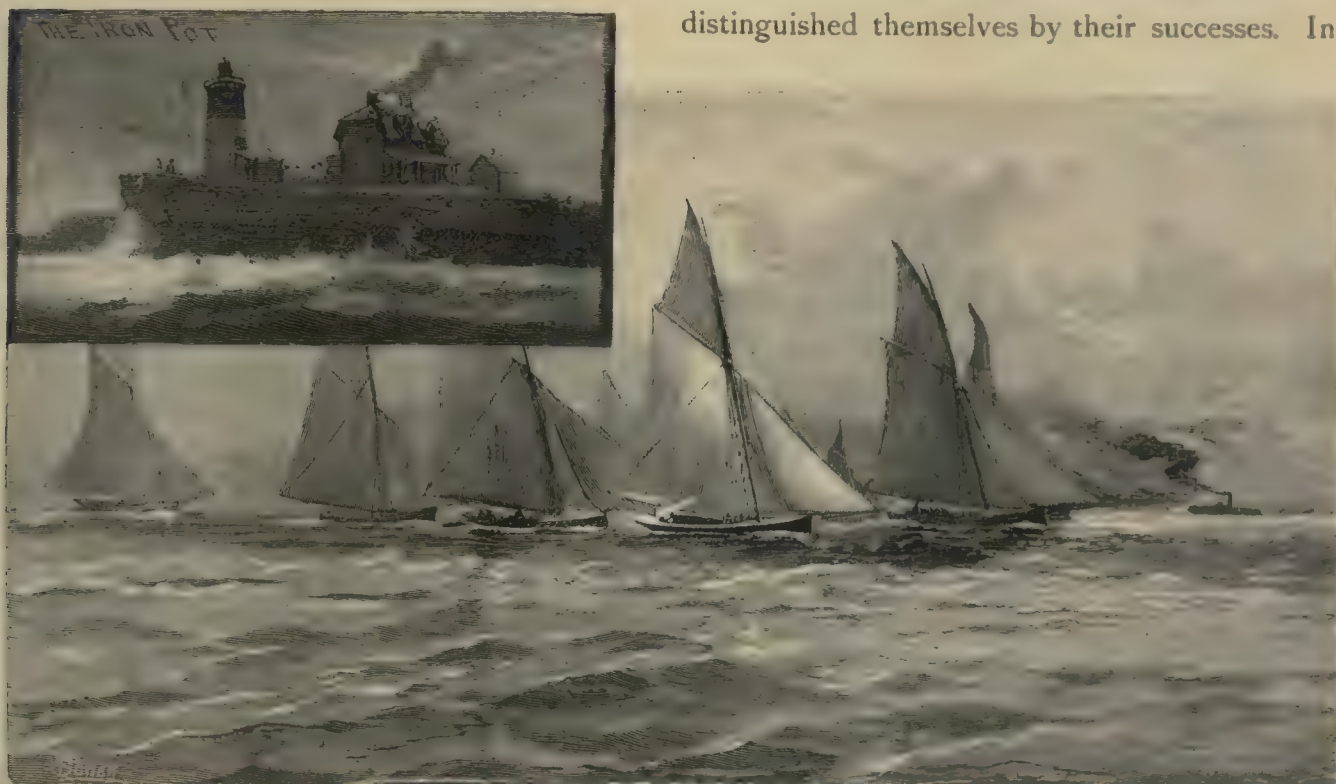
another, taught the rowers both of England and America that they have yet a great deal to learn before they can hope to stand against the material Australia has to show. The consequence of all this is, perhaps, that we have a tendency sometimes to boast—unkindly critics may say, to boast overmuch—of our victories in the fields of sport. But it is a characteristic of healthy sport all over the world to be proud of success, and to enjoy in the fullest measure the keenness of the race of emulation in the first instance, and the reality of victory when the course is run. This is the very essential element and true aim of all sport, and after every allowance has been made for the disappointment of defeat, the worst outside critics can say of us is that our healthy enjoyment and whole-hearted appreciation of our victories are as genuine as the struggle we make to excel and to avoid being beaten. The first sign of our decadence as a sport-loving people will be the decline of the pride we take in the triumphs of our representatives; and all who look on athletics, or field-sports of any kind, as the best means to develop a hardy and manly race of future Australians, will see in the pride we take in their achievements the best hope for the perpetuation of the old sturdy type of the energetic manhood of the country.

To speak of sport in Australia is to imply horse-racing, and to suggest at once the famous breed of Australian horses. In this connection the mention of the turf associates itself in the most intimate way with Flemington and all the glories of "Cup Day." This is the greatest of Australian festivals—the season when the representatives of the fashion and the wealth of all the Colonies gather by scores of thousands on the principal Victorian race-course at Flemington, just outside Melbourne, to witness the great racing event of the year in Australia. This magnificent race-course is the best of its kind in the Colonies, but its well-appointed grand-stand and reserve, with the spaces known as "The Flat" and "The Hill," are taxed to their utmost capacity by the masses of people who crowd to see the "Cup" race, and each other, on that day. At Caulfield there is another well-known race-course, while Randwick and Rosehill in New South Wales are the corresponding courses in that colony. To describe "Cup Day" at Flemington, and to give the history of the Australian turf in detail, would require a volume of itself, while even to name the horses of the various years, and tell the story of their triumphs, would be a lengthy task. Horse-racing is the national sport of Australia, and not only every metropolitan city has its race-course, and its regular meetings at stated periods, but almost every little township and hamlet can boast of its local race club and its periodical gatherings for this popular sport. The following are the fastest times on record in Australia:—Half-mile, 48 seconds; five furlongs, 1 m. 1½ secs.; six furlongs, 1 m. 14 secs.; seven furlongs, 1 m. 27¾ secs.; one mile, 1 m. 40 secs. (run by Boolka and Kingfish); one mile one furlong, 1 m. 55½ secs.; one mile and a quarter, (run by Carbine in 1890) 2 m. 7 secs.; one mile and a half, 2 m. 35½ secs.; one mile and three-quarters, 3 m. 4 secs.; two miles (run by Carbine, "Melbourne Cup," 1890,) 3 m. 28¼ secs.; two and a quarter miles, 3 m. 59½ secs.; three miles (run by Trident), 5 m. 25¾ secs. The fastest time for the "Melbourne Cup" (two miles) was by Carbine.

The history of Australian cricket dates from the first intercolonial match between New South Wales and Victoria, played in Melbourne in March, 1856. From that time these intercolonial matches were repeated every year, with alternations of success from

Sydney to Melbourne and back again to Sydney. The public interest in these contests developed until they became at length matters of general attention, even outside the circles of those immediately connected with the sport. However, it might be a difficult matter to find many people in Australia not interested in cricket for its own sake, for the love of this truly British game was transplanted to the Colonies at the very beginning of settlement, and it has continued, together with horse-racing, one of our most characteristic popular sports ever since. Up to the last intercolonial match, in 1891, the totals stood at twenty-three victories for New South Wales and twenty-three for Victoria. English cricketing teams began to visit Australia in 1862, the first being Stephenson's in that year. Since then ten other teams have visited the Colonies, including those of W. G. Grace, Lord Harris, the Honourable Ivo Bligh, Shaw, and other captains of more or less note.

Foot-ball is a favourite sport in the Australasian Colonies in the winter season, and although no unanimous agreement has been arrived at as to the rules under which the game shall be played, a good deal of interest is taken in the performances of the various metropolitan and other clubs. New Zealand players have long held a leading reputation as foot-ballers, and that colony has sent several representative teams to Australia, as well as to England, where they have distinguished themselves by their successes. In



A YACHT RACE ON THE DERWENT, HOBART, TASMANIA.

New Zealand the game is played strictly according to the Rugby rules, as well as in Queensland. The consequence is seen in the excellence of the representative teams the former colony is enabled to put into the field, while the players in New South Wales are divided into three different sections, according as they elect to follow the rules of the Rugby Union, the British Association, or those of the Australian game. Victorian players prefer what is called the Australian game. In Melbourne, the game holds a high place in popular favour, and it is no uncommon thing to see a gathering of twenty thousand people at a big match.

The game of bowls is played in most of the Colonies, but in Melbourne and Sydney clubs have been formed, and the game is taken up with enthusiasm by the elders of the population. Some of the provincial towns have also their local clubs; and a friendly rivalry existing between Sydney and Melbourne has resulted in an inter-colonial contest every year since 1880.

Foot-racing and pedestrianism in its various forms have always been popular branches of Australian sport, and here, again, the climate of the Colonies is found specially favourable to this description of athletic exercise. Walking-matches, hurdle-racing and other sports of the kind have always been actively encouraged in Sydney and Melbourne. Pedestrians from England have at different times visited the Colonies, and revived the interest in the pursuit of these popular forms of amusement. Bicycling has hundreds of votaries throughout Australasia, and the principal contests of the season are always looked forward to with a lively interest.

Within the past ten years boxing has obtained a great hold in all the Colonies, and professional and amateur contests for large stakes are almost as numerous as in the United States. Most of the cities have well-managed boxing clubs. Two Australians, F. P. Slavin and W. Murphy, in 1890, carried all before them in England and America, Slavin defeating the English champion, and the other colonial representative winning the feather-weight championship of America. At New Orleans, in the beginning of the year 1891, the New Zealand boxer, Fitzsimmons, defeated the American middle-weight champion, Dempsey, the holder of a hitherto unbeaten record. Peter Jackson, the coloured champion, also hails from Sydney.

Aquatic sports have found a field for their exercise on the Parramatta and Nepean Rivers and Sydney Harbour in New South Wales; on the Yarra River and Albert Park Lake in Melbourne; and on the harbours of most of the other important Australian and New Zealand cities. In this connection it is almost unnecessary to mention the victories of Trickett, Beach, Searle, Kemp and Stanbury, who have obtained a world-wide reputation, and earned for Australia the aquatic championship of the world. The achievements of these, and other famous New South Wales scullers, have brought the Colonies prominently before the Old World, thus indirectly attracting population and contributing to the development of the country. The victories of Australian rowers in England have also brought ex-champions to the Colonies in search of their lost honours, and their unsuccessful efforts to re-capture the laurels which had been carried away from them, drew the eyes of Europe and America in this direction. The case of Hanlan, for years the world's champion, is an instance of this; the results of contests in which he was engaged on the Nepean and Parramatta Rivers were flashed to all English-speaking peoples within a few hours of the events themselves. Yachting, also, has always been a favourite recreation in the Colonies. The romantically picturesque Harbour of Sydney is in the season white with the sails of various craft, gliding to and fro across the bright waters of the bay like the white wings of graceful sea-birds, and making the pleasant scene instinct with life and movement. In the Centennial Year a gold cup, valued at £500, and known as "The Hundred Years' Challenge Cup," to be won twice by the same yacht, was offered by the Government of New South Wales. For this trophy the *Era*, *Magic*, *Mistral* and *Waitangi* competed, the first-named being the winner. The most important regatta of the year takes place

in Sydney Harbour on Anniversary Day. On the Derwent, in Tasmania, and on the rivers and harbours of the other colonies this branch of sport is also enthusiastically pursued.

There is little fox-hunting in Australia, but in some respects coursing and kangaroo-hunting may be said to do more than supply its place. This latter is truly a national Australian sport, and one which to be appreciated must be shared. A kangaroo "drive," however, is a different affair. The marsupials are destructive to grass, and interfere



IN THE BRISBANE BOTANICAL GARDENS.

considerably with the squatter's flocks and herds. From time to time, therefore, a *battue* is organized, and the kangaroos destroyed by hundreds. As many as eight thousand have been recorded as the result of one of these "drives." In the old days of colonization no new-comer was considered to have been properly naturalized until he had killed his kangaroo.

Speaking generally, it may be said that there are few forms of out-door amusement that are not popular in the Australian Colonies. It is sometimes said, as a charge against the Australian character, that our people are over-fond of sports and amusements, to the detriment of more polished studies and more noble occupations. It is, however, an old aphorism that those who play well work well, and our devotion to sports and

amusements during the period of the growing nation's adolescence may perhaps be taken as a promise of earnestness in working out the problem of Australia's future.

CONCLUSION.

THE results of the hundred years of Australasian story may be very briefly summarized. The preceding pages present the outcome of what has been done in the Southern Ocean since the way was thrown open by the early discoverers, and to the philosophic observer of the world's growth, or the student of the development of social and political conditions, no more pregnant chapter could be laid open in the world's history. From small beginnings the Continent of Australia, silent for many centuries, and adding nothing to the sum of the world's knowledge or its people's happiness, has developed into what we have described it as being to-day—an open field for the world's surplus energy, in which the mistakes of Old World legislation can be corrected under new conditions. The future Australian States have the lesson of the past before them, with nothing in the way of the free application of its moral whenever it may make itself apparent. All of the Australasian Colonies to-day enjoy Responsible Government. Each controls its own affairs through an Executive, consisting of the Governor and a Cabinet of Ministers, chosen from a Parliament composed of two Houses of Legislature, of which one is always elective, and the other either partly nominee and partly elective, or wholly nominee. During the thirty-three years since Responsible Government was inaugurated there has been formed a distinct political class in each colony, capable of supplying to its public life the material from which responsible Ministers of the Crown may be drawn. Many of those who made political history in Australia during its first generation of legislative life are passing, or have passed, away. To Forbes, Wardell, Bland, and others who prepared the way for the first free Constitution, and to Wentworth, Cowper, Donaldson, Plunkett, Deas-Thomson, Martin, Murray, and others who won it, all Australia is indebted, whatever the differences of opinion may be as to the scope of the Constitution these latter framed. The names of those who have administered it are familiar enough to Australian ears in all the Colonies: among them may be mentioned Donaldson, Cowper, Parker, Forster, Robertson, Dalley, Martin, Parkes and others, in New South Wales; Haines, O'Shanassey, Duffy, Nicholson, McCulloch, Higinbotham, Francis, Service and Berry, in Victoria; Finniss, Torrens, Reynolds, Waterhouse, Ayers, Boucaut, Hart and Blyth, in South Australia; Herbert, Macalister, Macrossan, Lilley, Palmer, McIlwraith and Griffith, in Queensland; Champ, Whyte, Dry, Fysh, Douglas and Giblin, in Tasmania; and Sewell, Bell, Fox, Stafford, Atkinson, Domett, Whitaker, Weld, Waterhouse, Vogel, Pollen, Grey, Stout and others, in New Zealand. It would be easy to add to this list of names, but those given will suffice to mark the stages in the history of Australian political development.

We are now within a month's steam of Europe by sea, and within a few hours by telegraphic communication. Year by year the facilities for travel became easier, and the ends of the world are drawn nearer together. The advantages offered by Australia as a field for the investment of European capital, and for the settlement of the thousands who are ever and again crowded out of the Old World, are day by day becoming more

practically recognized. Capital and population are still the chief wants of the Australian Continent, which is capable of carrying many times the number of people at present found within its borders. Now that the facts of Australian progress have been clearly set forth, and its story has been fairly told, we may expect to see the rate of development progressively increased, and the problem of the future worked out with accelerated energy. No reader of these pages can repress the thought that the future of Australia must be a great and brilliant one—such a future, perhaps, as the history of no country in the world has yet recorded. We have everything in our favour. Far removed from international jealousies and the turmoil of European complications—set apart in a pleasant sea to work out our destiny untroubled by the distractions of contemporary politics—all favouring circumstances would seem to have combined together to usher in the second century of our history under the most auspicious conditions. The Centennial Exhibition held in Melbourne, in 1888, was not only a notable witness to Australian progress in the past, but a gauge of prosperity in the future, and a landmark in its history from which the past as well as the years that are to come will be measured. The Colonies have yet to unite upon a common basis of federation before the full measure of the results of Australian development will be attainable. But the signs of the times point to the day when a united Australia will evolve itself from the Federated Colonies, directed by a central representative authority in their national affairs, and autonomously governed by their own elected Parliaments so far as the internal policy of each is concerned. This is still a dream of the future. That it is not an over-sanguine one the chapters of an Australasian story which have been successively told in these volumes will sufficiently attest. For the most daring flight of prophecy, and the most dazzling vision of the wonderful future that is to be, could do no more than rival in audacity the dreams, so magically realized, of the argonauts of those adventurous argosies of little more than a hundred years ago—

Sailing in search of some new continent.
Whose rushing keels made music as they went



APPENDIX.

THE GROWTH OF POPULATION TO THE YEAR 1891.

THE history of exploration in Australasia is also the history of the expansion of settlement, the development of the Continent's resources, and the growth of population. The early colony was shut in and circumscribed by the apparently impassable escarpment of the Blue Mountains. The settled portion of the known Australian continent was represented by a part of the county of Cumberland on its eastern coast, and for a period of about a quarter of a century after the arrival of the "First Fleet" man sat down dismayed before the blue-looming barrier that cut him off from the smiling plains and rich pasturage that stretched for fertile leagues into the luxuriant country beyond the bold bastion of the Great Divide. Again and again he essayed its conquest. Settlement spread slowly from the coast to the feet of the mighty hills—but spread no farther. Rewards were offered for the discovery of even a sheep-walk; but every effort to storm the citadel of the mountains ended in a repulse. Foveaux despairingly wrote that the colony could never become of very great importance—Nature had too rigidly defined its boundaries; once the limit was reached of production in Cumberland's fertile county progress was eternally barred, and settlement must stand still for ever. But in the year 1813 the mountain heights were captured, and a glimpse flashed on the mental vision of the men of that time of boundless possibilities for the future—of development and expansion immeasurable. From now henceforth march through the pages of Australian history, achieving conquest upon conquest, those pioneers of settlement—the explorers. Fast in their wake follow the flocks and herds, drought-driven, of the early squatters. The boundaries spread out before the ever-swelling stream of enterprise, the horizon widens, the massy wall of forest-growth falls to the music of the settler's axe, the shy natives fall back yet further into the dim recesses of the bush, and the silent and leafy wilderness disappears to make place for the clearings, the smiling farms, the fruitful gardens and orchards, the mills of miller and sawyer, the villages and towns and complex civilization and organized society of a later date.

Australasia began in a little penal settlement on the shores of Port Jackson somewhat over a hundred years ago. A little more than a thousand prisoners and soldiers all told formed the nucleus of a southern empire which to-day contains close on four million souls. During the lapse of that century Australasia has in her experience epitomized the progress of ages. In one hundred years this latest comer among nations has bridged the gulf separating the earliest days of rude and adventurous settlement from the modern time of advanced progress, replete with all the appliances that characterise the civilization of the æon-historied lands beyond the seas. And this compressed historic life—comprised within the brief period of a little over a century—is a survey of the history of the earth, or rather of the annals of man upon its surface. The earliest

settler to these shores was the blood-stained buccaneer, flying in hot haste from the fierce pursuit and just revenge of the lawful mariner to mangrove-mantled creeks and verdant bights for shelter and security. Then came the sentenced out-law, the exile from the old lands anxious to rid themselves of their criminal off-spring; and then the voluntary immigrant desirous of finding in a virgin soil the garnered increment of unused energy, in a primal civilization the scope and freedom denied to him in the land of his birth. Next came the shepherd, snatching from the uncropped pasturage a novel and a nomad wealth—far different from, far distancing the experience of the elder-settled earth. Gold was discovered—and a hurried rush set in from every quarter of the globe, bringing thither, besides much that might have well been spared, the errant brawn and brain of Europe and America. The next stage in our development is represented, therefore, by the digger delving and diving into the mysterious crypts and secret places of the earth, his cheek reddened with the hectic flush of the gold-fever, and his sleep oft tortured with tantalising visions of deep-buried treasure caves, elusive in his waking hours. By and by in this train of progress appeared the farmer, legitimate son of Nature, reaping only where he had sown, gathering only that which he had strawed, content with a just increase. The procession grows now rapidly denser. Successive links in this chain of modern development they throng—the merchant, the worker at the loom, in the quarry, the workshop, the factory, the counting-house, the teeming dockyard, the palatial emporiums of commerce—there appears no limit to the manifestations of the young sap of that tree whose shoot first broke the crust of Austral soil but little more than a hundred years ago. This is the history of the whole earth; but in the old lands it covers centuries. Here in this New World the great transition between the impenetrable and unknown forest trodden only by savages, and the busy streets, the crowded wharves, the close-thronged palaces of commerce and of industry, the temples sacred to art and to faith, the legislative halls consecrated to liberty, the cattle-dotted plains, the teeming flocks and herds, the ship-lined quays, the sail-flecked harbours, the luxuriant vineyards, the acres of golden grain, in short, the youthful energy of a new-born nation, are all found summarised in the brief epoch between the year 1788 and that of 1891. The two following tables present, in all the eloquence of figures, a panoramic view of the growth of population in Australasia during this period:

The population of Australia from 1788 to 1824, according to the statements of the musters made in New South Wales, Van Diemen's Land and Norfolk Island, as prepared by the Government Statistician of New South Wales in the General Report of the Census of 1891:

Year	Population	Year	Population	Year	Population	Year	Population
1788*	966	1799	5,963	1807	9,130	1816	17,091
1790	2,239	1800	5,911	1810	11,952	1817	20,806
1791	4,059	1801	6,490	1811	11,525	1820	29,339
1792	4,213	1802	8,013	1812	12,023	1821	35,489
1794	4,684	1804†	8,628	1813	13,568	1822	34,261
1795	4,258	1805	8,541	1814	14,105	1823	39,701
1796	4,906	1806	8,608	1815	14,864	1824	45,965

* From 1788 until the year 1813 the population of Norfolk Island is included in the totals of population of New South Wales.

† Tasmania, then known as Van Diemen's Land, was settled in 1804, and the yearly statements include the inhabitants of that Island up to the year 1825.

‡ The years 1822 and 1823 are given inclusive of the military; the years 1820, 1821 and 1824 are given exclusive of the military. The statements of all the other years from 1788 to 1817 include the military.

|| The yearly statement for 1824 includes the few inhabitants at Moreton Bay.

The population of the Seven Colonies from the foundation of Tasmania in 1825 until the year 1891:

Year.	N. S. Wales.	Tasmania.	W. Australia.	S. Australia.	New Zealand.	Victoria.	Queensland.	Total.
*1825	c38,229	14,192	...	...	...	...	...	52,421
1826	...	14,992	...	...	...	...	...	...
1827	...	16,833	...	...	...	...	...	...
1828	c36,598	18,128	...	...	...	...	...	54,726
1829	...	20,015	W. A. founded	...	...	...	...	...
1830	...	24,279	850	...	...	...	...	...
1831	...	26,640	...	...	...	...	...	...
1832	...	28,903	1,511	...	...	...	...	...
1833	c60,794	34,328	(1,511)	...	...	...	...	96,633
1834	...	37,688	...	...	...	...	...	...
1835	...	40,172	...	...	...	...	...	...
†1836	c77,096	43,679	(1,600)	546	...	...	...	122,921
1837	...	42,698	1,830	...	...	...	...	...
1838	...	45,764	...	6,000	...	...	...	...
1839	...	44,033	...	...	...	...	...	...
1840	...	45,999	2,354	14,600	‡2,050	...	...	...
1841	c130,856	c50,216	(2,354)	(14,600)	5,000	...	...	203,026
1842	...	...	3,476	...	10,992	...	...	...
1843	...	...	c3,853	...	11,848	...	...	...
1844	...	...	...	c17,366	12,447	...	...	...
1845	...	...	...	...	12,774	...	...	...
1846	c189,609	...	...	c22,390	13,274	...	...	...
1847	...	c70,164	...	...	14,477	...	...	...
1848	...	...	c4,622	...	17,166	...	...	...
1849	...	...	...	...	19,543	...	...	...
1850	...	...	...	...	22,108	...	...	...
1851	c190,999	c70,130	(7,800)	c63,700	26,707	c77,345	...	436,681
1852	...	...	...	...	27,633	...	...	...
1854	...	...	c11,743	...	32,554	c236,798	...	...
1855	...	...	...	c85,821	37,192	...	...	...
1856	c269,722	...	...	...	45,540	...	...	...
1857	...	c81,492	...	...	49,082	c410,766	...	...
1858	...	...	...	...	c59,413	...	...	...
1859	...	...	c14,837	...	...	...	23,520	...
1860	...	...	...	...	...	...	28,056	...
1861	c350,860	c89,977	(15,691)	c126,830	c99,021	c540,322	c30,059	1,252,760
1864	...	...	...	...	c172,158	...	c61,467	...
1866	...	...	...	c163,452	...	...	...	...
1867	...	...	...	...	c218,668	...	...	...
1868	...	...	...	...	...	...	c99,901	...
1870	...	c99,328	c24,785	...	...	...	...	...
1871	c503,981	(99,328)	(24,785)	c185,626	c256,393	c731,528	c120,104	1,921,745
1874	...	...	...	...	c299,514	...	...	...
1876	...	...	...	c213,271	...	...	c173,283	...
1878	...	...	...	...	c414,412	...	...	...
1881	c751,468	c115,705	c29,708	c279,865	c489,933	c862,346	c213,525	2,742,550
1886	...	...	...	...	c578,482	...	c322,853	...
1891	c1,132,234	c146,667	c49,782	c320,431	c626,658	c1,140,405	c393,718	3,809,895

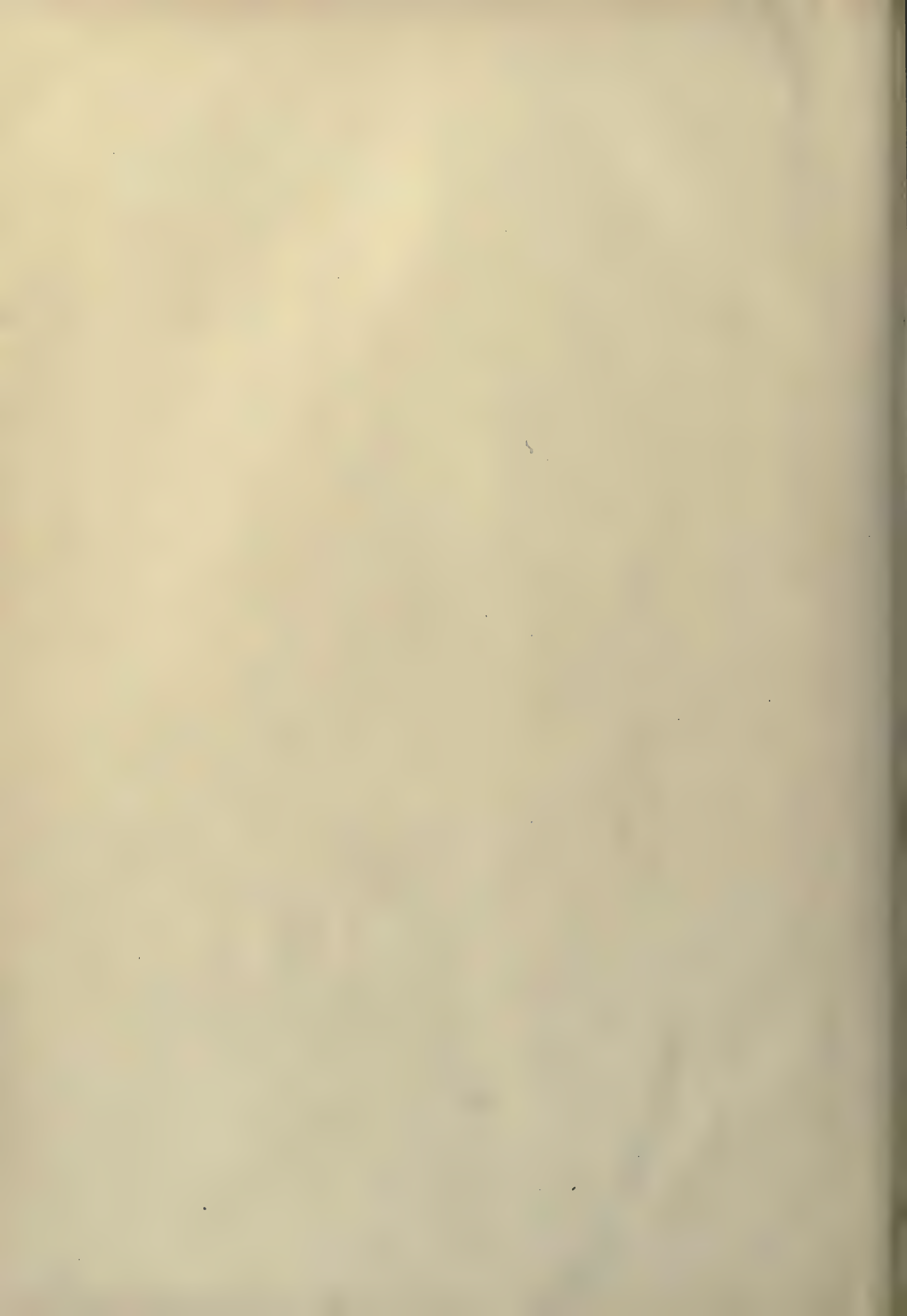
* The statement for New South Wales in 1825 is inclusive of the Military.

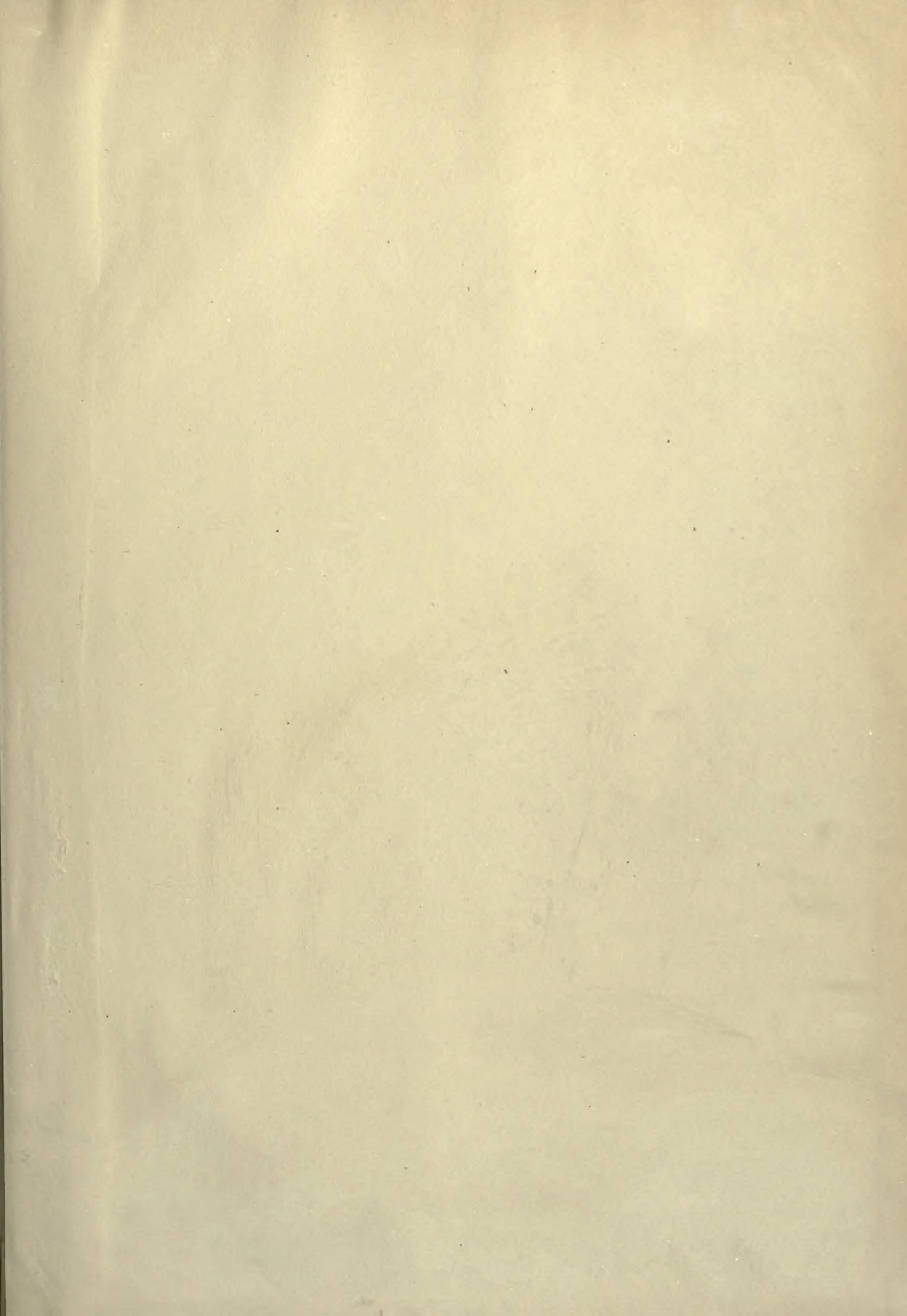
† From this year, 1836, until the date of separation in 1851, the population of Victoria, then known as Port Phillip, is included in that of the mother-colony.

‡ The population of New Zealand is given exclusive of the Military and the Maoris.

c—denotes a census year.







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